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Effective: 08-April-2010
Expires: 06-May-2010

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INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME ALTERNATE MINIMUMS

ALBANY, OR

ALBANY MUNI ..... **VOR/DME or GPS-A**
NA except for operators with approved weather reporting service.

ARLINGTON, WA

ARLINGTON MUNI ..... **NDB or GPS Rwy 34**
Category D, 800-2½.
NA when Paine Field control tower closed.

ASTORIA, OR

ASTORIA RGNL ..... **RNAV (GPS) Rwy 26[12]**
VOR Rwy 8[3]
[1]NA when local weather not available.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Category C, 800-2¼; Category D, 900-3.

AURORA, OR

AURORA STATE ..... **LOC Rwy 17[1]**
RNAV (GPS) Rwy 17[23]
RNAV (GPS) Rwy 35[2]
[1]Category D, 800-2¼.
[2]NA when local weather not available.
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

BAKER, MT

BAKER MUNI ..... **NDB Rwy 13[1]**
NDB Rwy 31[2]
[1]Categories A,B, 1100-2; Categories C,D, 1100-3.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

BAKER CITY, OR

BAKER CITY MUNI ..... **RNAV (GPS) Rwy 13[12]**
VOR-A[13]
VOR/DME Rwy 13[24]
[1]NA when local weather not available.
[2]Category D, 900-2¾.
[3]Categories A,B, 1900-2; Categories C,D, 1900-3.
[4]NA when control zone not in effect.

NAME ALTERNATE MINIMUMS

BELLINGHAM, WA

BELLINGHAM INTL ..... **ILS or LOC Rwy 16**
RNAV (GPS) Rwy 16
NA when local weather not available.

BIG PINEY, WY

MILEY MEMORIAL FIELD ..... **VOR Rwy 31**
Category D, 800-2¼.

BILLINGS, MT

BILLINGS LOGAN INTL ..... **NDB Rwy 10L[1]**
RNAV (GPS) Rwy 10L[2]
RNAV (GPS) Rwy 28R[3]
[1]Category D, 800-2¼.
[2]Categories A,B,C,D, 800-2¼.
[3]Categories A,B, 900-2; Categories C,D, 900-3.

BOISE, ID

BOISE AIR TERMINAL(GOWEN FIELD) ..... **LOC BC Rwy 28L**
RNAV (GPS) Y Rwy 10R
RNAV (GPS) Y Rwy 28L
VOR/DME or TACAN Rwy 10L
VOR/DME or TACAN Rwy 28L
Category E, 1000-3.

BOZEMAN, MT

GALLATIN FIELD ..... **VOR Rwy 12**
Category C, 800-2¼; Category D, 800-2½.

BREMERTON, WA

BREMERTON NATIONAL .. **RNAV (GPS) Rwy 1**
RNAV (GPS) Rwy 19[1]
NA when local weather not available.
[1]Categories A,B, 1200-2; Categories C,D, 1200-3.

NAME ALTERNATE MINIMUMS

BUFFALO, WY

JOHNSON COUNTY ..... **RNAV (GPS) Rwy 31[1]**
VOR/DME Rwy 31[2]
NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category C, 800-2¼; Category D, 800-2½.

BURLEY, ID

BURLEY MUNI ..... **VOR-A**
VOR/DME-B
NA when local weather not received.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL ..... **NDB Rwy 10[1]**
RNAV (GPS) Rwy 10
RNAV (GPS) Rwy 28
NA when local weather not available.
[1]Categories A,B, 1300-2; Categories C,D, 1300-3.

BURNS, OR

BURNS MUNI ..... **VOR Rwy 30**
Categories A, B, 1400-2; Categories C,D, 1400-3.

BUTTE, MT

BERT MOONEY ..... **ILS Y Rwy 15[1]**
LOC/DME Rwy 15[2]
RNAV (GPS) Y Rwy 15[3]
RNAV (GPS) Z Rwy 15,1200-2
VOR or GPS-B,1400-3
VOR/DME or GPS-A,3000-3
[1]Categories A, B, C, 1200-4.
[2]Categories A,B, 1300-2; Categories C,D, 1300-3.
[3]Categories A,B, 1500-2; Categories C,D, 1500-3.

CALDWELL, ID

CALDWELL INDUSTRIAL ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.

CASPER, WY

CASPER/NATRONA COUNTY INTL ..... **ILS or LOC Rwy 3**
ILS, Categories A,B, 800-2; Category C 800-2½; Category D, 800-2¾; Category E, 900-3.
LOC, Category C, 800-2½; Category D, 800-2¾; Category E, 900-3.

NAME ALTERNATE MINIMUMS

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD ..... **ILS or LOC Rwy 27[1]**
NDB Rwy 27[1]
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 31[2]
[1]NA when control tower closed.
[2]NA when local weather not available.

CODY, WY

YELLOWSTONE REGIONAL ..... **RNAV (GPS) Rwy 22[1]**
VOR or GPS-A[2]
[1]Category C, 800-2¼; Category D, 200-2¾.
[2]Category D, 900-3.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FIELD .... **ILS or LOC/DME Rwy 5**
NDB Rwy 5
RNAV (GPS) Rwy 5
VOR Rwy 5
VOR/DME Rwy 1
NA when local weather not available.

CORVALLIS, OR

CORVALLIS MUNI ..... **VOR-A**
Categories A,B,1200-2; Categories C,D, 1200-3.

DEER PARK, WA

DEER PARK ..... **RNAV (GPS) Rwy 34**
NA when local weather not available.

DILLON, MT

DILLON ..... **VOR or GPS-A,**1500-3
VOR/DME or GPS-B
NA when Dillon altimeter setting not available.

DOUGLAS, WY

CONVERSE COUNTY ..... **VOR Rwy 29**
Categories A,B, 1100-2; Categories C,D, 1100-3. DME standard.

EASTSOUND, WA

ORCAS ISLAND ..... **RNAV (GPS)-A**
Categories A, B, 1100-2.
NA when local weather not available.

ELLENSBURG, WA

BOWERS FIELD ..... **RNAV (GPS) Rwy 25[1]**
RNAV (GPS) Rwy 29
VOR-B[2]
NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category A, 1500-2.

NAME ALTERNATE MINIMUMS

EPHRATA, WA

EPHRATA MUNI ..... **RNAV (GPS) Rwy 3[1]**
RNAV (GPS) Rwy 21[2]
VOR/DME Rwy 3[1]
VOR Rwy 21[1]

NA when local weather not available.
[1]Category D, 1300-3.
[2]Category C, 800-2¼; Category D, 1300-3.

EUGENE, OR

MAHLON-SWEET
FIELD ..... **ILS or LOC/DME Z Rwy 16R[1]**
ILS or LOC Y Rwy 16R[1]
ILS or LOC/DME Rwy 16L[12]
RNAV (GPS) Rwy 34R[2]
VOR or GPS-A[3]

[1]NA when control tower closed.
[2]NA when local weather not available.
[3]Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

EVANSTON, WY

EVANSTON-UINTA COUNTY
BURNS FIELD ..... **ILS or LOC/DME Rwy 23**
Categories C,D, 700-2.

EVERETT, WA

SNOHOMISH COUNTY(PAINE
FIELD) ..... **ILS or LOC/DME Rwy 16R**
NA when control tower closed.
NA when local weather not available.

FORT BENTON, MT

FORT BENTON ..... **RNAV (GPS) Rwy 23**
NA when local weather not available.

GILLETTE, WY

GILLETTE-CAMPBELL
COUNTY ..... **ILS or LOC Rwy 34[12]**
RNAV (GPS) Rwy 16[3]
RNAV (GPS) Rwy 34[4]
VOR/DME Rwy 16[5]
VOR/DME Rwy 34[1]

[1]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]NA when control tower closed.
[3]Categories A,B,C, 800-2¼; Category D, 1000-3.
[4]Categories A,B,C,D, 1200-4.
[5]Category C, 800-2¼; Category D, 1000-3.

GLASGOW, MT

WOKAL FIELD/
GLASGOW INTL ..... **VOR Rwy 12**
Categories A,B, 900-2; Categories C,D, 900-3.
VOR/DME standard.

NAME ALTERNATE MINIMUMS

GLENDIVE, MT

DAWSON
COMMUNITY ..... **NDB or GPS Rwy 12,**900-2¾

GOODING, ID

GOODING MUNI ..... **RNAV (GPS) Rwy 7**
RNAV (GPS) Rwy 25
NA when local weather not available.

GRAY AAF (KGRF)

FORT LEWIS, WA ..... **NDB Rwy 15**
NDB Rwy 33
ILS or LOC Rwy 15
COPTER NDB Rwy 15
NA when control tower closed.

GREAT FALLS, MT

GREAT FALLS INTL ..... **NDB Rwy 34**
Category D, 800-2¼.

GREYBULL, WY

SOUTH BIG HORN COUNTY .... **RNAV (GPS)-A**
RNAV (GPS) Rwy 33[1]
NA when local weather not available.
[1]Category D, 1200-3.

HAILEY, ID

FRIEDMAN
MEMORIAL ..... **RNAV (GPS) W Rwy 31**
Categories A,B, 1900-2; Category C, 1900-3.

HAVRE, MT

HAVRE CITY-COUNTY ..... **VOR Rwy 26**
Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.

NAME ALTERNATE MINIMUMS

HELENA, MT

HELENA RGNL ..... **ILS or LOC Y Rwy 27[12]**
ILS or LOC Z Rwy 27[12]
LOC/DME BC-C[13]
NDB-D[14]
RNAV (GPS) Y Rwy 9[5]
RNAV (GPS) Rwy 23[6]
RNAV (GPS) X Rwy 27[5]
RNAV (RNP) Z Rwy 9[7]
RNAV (RNP) Y Rwy 27[7]
RNAV (RNP) Z Rwy 27[79]
VOR-A[8]
VOR/DME-B[6]

[1]NA when control tower closed.
[2]Categories A, B, 1600-2; Categories C, D, E, 1600-3.
[3]Categories A, B, 1300-2; Categories C, D, 1300-3.
[4]Category A, 1200-2.
[5]Categories A, B, 1600-2; Categories C, D, 1600-3.
[6]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[7]NA when local weather not available.
[8]Categories A, B, 2900-2; Categories C, D, 2900-3.
[9]1000-4.

HOQUIAM, WA

BOWERMAN ..... **RNAV (GPS) Rwy 24[1]**
VOR/DME Rwy 24[2]
VOR Rwy 6[1]

[1]Category D, 800-2¼.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

IDAHO FALLS, ID

IDAHO FALLS RGNL ..... **ILS or LOC Rwy 20[1]**
LOC BC Rwy 2[2]
RNAV (GPS) Rwy 20[3]
VOR Rwy 20[3]

[1]ILS, Category E, 700-2½. LOC, Category E, 800-2½.
[2]Category E, 800-2½.
[3]NA when local weather not available.

JACKSON, WY

JACKSON HOLE ..... **RNAV (GPS) X Rwy 1[1]**
RNAV (GPS) Y Rwy 19[1]
RNAV (RNP) Y Rwy 1, 10681200-4
VOR/DME Rwy 1[2]
VOR/DME Rwy 19[3]

[1]Categories A,B, 1200-2; Categories C,D, 1200-3.
[2]Categories A,B,1000-2; Categories C,D, 1000-3.
[3]Categories A,B,1400-2; Categories C,D, 1400-3.

NAME ALTERNATE MINIMUMS

JEROME, ID

JEROME COUNTY ..... **RNAV (GPS) Rwy 9**
RNAV (GPS) Rwy 27[1]
VOR/DME-A

NA when local weather not available.
[1]Categories A, B, 1300-2; Categories C, D, 1300-3.

JOHN DAY, OR

GRANT COUNTY RGNL/
OGILVIE FIELD ..... **RNAV (GPS) Y Rwy 9**
Category B, 900-2; Category C, 900-2½.

KALISPELL, MT

GLACIER PARK INTL ..... **ILS or LOC Rwy 2[1]**
RNAV (RNP) Y Rwy 2[2]
RNAV (RNP) Rwy 20, 800-2½[2]

[1]Categories C, D, 700-2.
[2]NA when local weather not available.

KELSO, WA

SOUTHWEST
WASHINGTON RGNL ..... **RNAV (GPS) Rwy 12**
Categories A, B, 900-2.

KLAMATH FALLS, OR

KLAMATH FALLS ..... **ILS or LOC Rwy 32[1]**
RNAV (GPS) Rwy 14[2]
VOR/DME or TACAN Rwy 14[3]
VOR/DME or TACAN Rwy 32[4]
VOR or GPS-B,2100-3

[1]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3. LOC, DME required.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[3]Categories C,D, 1000-3; Category E, NA.
[4]Category B, 900-2; Categories C,D, 1000-3; Category E, 1500-3.

LAKEVIEW, OR

LAKE COUNTY ..... **VOR/DME-A**
Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

LEWISTON, ID

LEWISTON-NEZ PERCE
COUNTY ..... **ILS Rwy 26[12]**
RNAV (GPS) Rwy 8[3]
RNAV (GPS) Rwy 12[3]
RNAV (GPS) Rwy 26[3]
VOR Rwy 8[4]
VOR Rwy 26[3]

[1]ILS, Category D, 800-2¼.
[2]NA when control tower closed.
[3]Category D, 800-2¼.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.

NAME ALTERNATE MINIMUMS

LEWISTOWN, MT

LEWISTOWN MUNI ..... **RNAV (GPS) Rwy 7**
VOR Rwy 7

Category D, 800-2¼.

LIVINGSTON, MT

MISSION FIELD ..... **VOR/DME-B[1]**
VOR-A[2]

[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Categories A, B, 2200-2; Categories C,D, 2200-3.

MC CALL, ID

MC CALL MUNI ..... **RNAV (GPS) Rwy 16[1]**
RNAV (GPS) Y Rwy 34[2]
RNAV (GPS) Z Rwy 34[3,4]

[1]Category C, 900-2½.
[2]Categories A, B, 1600-2; Categories C, D, 1600-3.
[3]NA when local weather not available.
[4]Category C, 900-2½; Category D, 1000-3.

MC MINNVILE, OR

MC MINNVILLE MUNI ..... **ILS or LOC Rwy 22**
RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 22
VOR/DME-B

NA when local weather not available.
Category D 800-2¼.

MEDFORD, OR

ROGUE VALLEY INTL-
MEDFORD ..... **ILS or LOC/DME Rwy 14[1,2]**
LOC/DME BC-B[2,3]
RNAV (GPS)-D[3]
RNAV (GPS) Rwy 14[4]
VOR-A[5]
VOR/DME-C[3]
VOR/DME Rwy 14[5]

[1]ILS, Categories A, B, C, 700-2; Category D, 900-2½. LOC, Category D, 900-2½.
[2]NA when control tower closed.
[3]Categories A, B, 2300-2; Categories C, D, 2300-3.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.
[5]Categories A, B, 1400-2;Category C, D 1400-3.

NAME ALTERNATE MINIMUMS

MISSOULA, MT

MISSOULA INTL ..... **ILS Rwy 11[1]**
RNAV (GPS) Y Rwy 11[2,3]
RNAV (RNP) Z Rwy 11[2],800-2½
VOR/DME or GPS-A,2000-3
VOR/DME or GPS-B,2000-3

[1]ILS, 1600-6. LOC,NA.
[2]NA when local weather not available.
[3]Categories A, B, 1900-2; Categories C, D, 1900-3.

MOSES LAKE, WA

GRANT COUNTY INTL ... **ILS or LOC Rwy 32R[1]**
NDB Rwy 32R[2]
RNAV (GPS) Rwy 4[1]
RNAV (GPS) Rwy 14L[1]
RNAV (GPS) Rwy 22[1]
VOR Rwy 4[2]
VOR -1 Rwy 14L[2]
VOR -3 Rwy 14L[2]
VOR Rwy 22[2]
VOR Rwy 32R[2]

[1]NA when local weather not available.
[2]NA when control tower closed.

NEWCASTLE, WY

MONDELL FIELD ..... **VOR or GPS Rwy 31**

NA except for operators with approved weather reporting service.
Categories A,B, 900-2;Categories C,D, 900-3.

NORTH BEND, OR

SOUTHWEST OREGON
RGNL ..... **ILS or LOC Rwy 4[1]**
NDB or GPS Rwy 4[2]
VOR or GPS-A[3]
VOR/DME or GPS-B[4]
VOR/DME Rwy 4[4]

[1]ILS,Categories A,B, 800-2; Category C, 900-2¼, Category D,1000-3. LOC, Category C, 900-2¼, Category D,1000-3.
[2]Category C, 900-2¼;Category D, 1000-3.
[3]Categories A,B, 1100-2; Categories C,D, 1100-3.
[4]Categories C,D, 1000-3.

OAK HARBOR, WA

AJ EISENBERG ..... **RNAV (GPS) Rwy 7**

NA when local weather not available.

OLYMPIA, WA

OLYMPIA RGNL ..... **ILS or LOC Rwy 17[1,2,3]**
RNAV (GPS) Rwy 17[2]
RNAV (GPS) Rwy 35[2]
VOR-A[2,4]
VOR/DME Rwy 35[2]

[1]ILS, Categories C, D, 700-2.
[2]NA when local weather not available.

NAME ALTERNATE MINIMUMS

ONTARIO, OR

ONTARIO MUNI ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

PASCO, WA

TRI-CITIES ..... **ILS or LOC Rwy 21R[1,2]**
RNAV (GPS) Rwy 3L
RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 21R
RNAV (GPS) Rwy 30
VOR Rwy 21R[3]
VOR/DME Rwy 30
NA when local weather not available.
[1]NA when control tower closed.
[2]ILS, Categories A,B,C, 700-2; Category D, 700-2¼. LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.

PENDLETON, OR

EASTERN OREGON RGNL AT
PENDLETON ..... **ILS or LOC/DME Rwy 25[1]**
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 11
RNAV (GPS) Rwy 25
RNAV (GPS) Rwy 29
VOR Rwy 7
NA when local weather not available.
[1]ILS, NA when control tower closed.

PINEDALE, WY

PINEDALE/RALPH WENZ
FIELD ..... **NDB-A[1]**
RNAV (GPS) Rwy 11[2]
RNAV (GPS) Rwy 29[2]
NA when local weather not available.
[1]Category C, 800-2¼; Category D, 800-2½.
[2]Category D, 800-2½.

POCATELLO, ID

POCATELLO RGNL ..... **ILS or LOC Rwy 21[1]**
RNAV (GPS) Rwy 3[2]
RNAV (GPS) Rwy 21[2]
[1]NA when control zone not in effect.
[2]NA when local weather not available.

PORT ANGELES, WA

WILLIAM R
FAIRCHILD INTL ..... **ILS or LOC Rwy 8**
RNAV (GPS) Rwy 8[1]
RNAV (GPS) Rwy 26
NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.

NAME ALTERNATE MINIMUMS

PORTLAND, OR

PORTLAND INTL ..... **ILS or LOC Rwy 10L[1]**
ILS or LOC Rwy 10R[2]
ILS or LOC Rwy 28L[3]
ILS or LOC Rwy 28R[4]
LOC/DME Rwy 21[5]
RNAV (GPS) Rwy 10L[5]
RNAV (GPS) Rwy 10R[6]
RNAV (GPS) Rwy 12[7]
RNAV (GPS) Rwy 28L[8]
RNAV (GPS) Rwy 28R[8]
VOR/DME Rwy 21[5]
VOR-A [9]
VOR Rwy 28R[5]
[1]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3. LOC, Category D, 1000-3.
[2]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3; Category E, 1100-3.
[3]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3; Category E, 1100-3. LOC, Category D, 1000-3; Category E, 1100-3.
[4]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3.
LOC, Category D, 1000-3.
[5]Category D, 1000-3.
[6]Categories A,B,C 800-5; Category D, 1000-5.
[7]NA when local weather not available.
[8]Category D, 1000-3.
[9]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.

PORTLAND-HILLSBORO .. **ILS or LOC Rwy 12[1]**
RNAV (GPS) Rwy 12[2]
[1]Categories A,B, 1000-2;Category C, 1000-2¾; Category D, 1000-3.
[2]NA when local weather not available.

PORTLAND-TROUTDALE ..... **NDB or GPS-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1300-3.

PULLMAN/MOSCOW, WA

PULLMAN/MOSCOW
MUNI ..... **RNAV (GPS) Rwy 5,**800-2¼

RAWLINS, WY

RAWLINS MUNI/
HARVEY FIELD ..... **RNAV (GPS) Rwy 22[1]**
VOR/DME Rwy 22[2]
[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[2]Categories A, B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

NAME ALTERNATE MINIMUMS

REDMOND, OR

ROBERTS FIELD ..... **ILS or LOC Rwy 22[1]**
VOR/DME Rwy 22[2]

[1]ILS,LOC,Category D,800-2¼; Category E, 800-2½.
[2]Category A, B, 1000-2; Category C, 1000-2¾; Category D, E, 1000-3.

RENTON, WA

RENTON MUNI ..... **NDB Rwy 16[1]**
RNAV (GPS) Y Rwy 16[2]
RNAV (GPS) Z Rwy 16[3]

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Categories A, B, 900-2.

REXBURG, ID

REXBURG-MADISON COUNTY ..... **RNAV (GPS) Rwy 35**

NA when local weather not available.
Category D, 800-2½.

RICHLAND, WA

RICHLAND ..... **NDB Rwy 19[1]**
RNAV (GPS) Rwy 19[1]
RNAV (GPS) Rwy 26[1]
VOR/DME-A[2]
VOR Rwy 26[1]

[1]Category D, 800-2½.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

RIVERTON, WY

RIVERTON RGNL ..... **ILS or LOC Rwy 28**
RNAV (GPS) Rwy 10
RNAV (GPS) Rwy 28
VOR Rwy 10
VOR Rwy 28

NA when local weather not available.

ROCK SPRINGS, WY

ROCK SPRINGS-SWEETWATER COUNTY ..... **VOR-B**

Category D, 800-2¼.

ROSEBURG, OR

ROSEBURG RGNL ..... **RNAV (GPS)-B**

NA when local weather not available.
Categories A, B, 1200-2; Category C, 1200-3; Category D, 1400-3.

NAME ALTERNATE MINIMUMS

SALEM, OR

MCNARY FIELD ..... **ILS or LOC Rwy 31[12]**
LOC/DME Rwy 31[3]
RNAV (GPS) Rwy 31[13]

[1]NA when local weather not available.
[2]ILS, Categories A, B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[3]Category D, 800-2½.

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK ..... **VOR/DME or GPS-A**

Category B, 900-2; Category C, 1000-2¾; Category D 1300-3.

SEATTLE, WA

BOEING FIELD-KING COUNTY INTL ..... **ILS Rwy 13R[1]**
ILS Rwy 31L[2]
LOC/DME Rwy 13R[3]
RNAV (GPS) Y Rwy 13R[4]
RNAV (RNP) Z Rwy 13R[5]

[1]ILS, Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[3]Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[4]Category B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[5]Categories A, B, C, D, 800-2¼.

SHERIDAN, WY

SHERIDAN COUNTY ..... **ILS or LOC/DME Rwy 32**
RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 32
VOR Rwy 14

NA when local weather not received.
Category D, 800-2¼.

SIDNEY, MT

SIDNEY-RICHLAND MUNI ..... **NDB Rwy 1[1]**
NDB Rwy 19[2]

[1]Category D, 800-2¼.
[2]Categories C,D, 800-2½.

NAME ALTERNATE MINIMUMS

SPOKANE, WA

FELTS FIELD ..... **ILS/DME Rwy 21R[1]**
RNAV (GPS)-A[2]
RNAV (GPS) Rwy 3L[2]
VOR Rwy 3L[34]

[1]Categories A,B, 1000-2;Category C, 1000-2¾.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.
[3]Categories A, B, 1000-2; Categories C, D, 1000-3.
[4]NA when local weather not available.

SPOKANE INTL ..... **ILS or LOC Rwy 3[1]**
ILS or LOC/DME Rwy 21[1]
VOR Rwy 3[2]

[1]ILS, Category D, 700-2.
[2]Category E, 800-2½.

TACOMA, WA

TACOMA NARROWS ..... **ILS Rwy 17[1]**
NDB Rwy 35[1]
RNAV (GPS) Rwy 17[12]
RNAV (GPS) Rwy 35[23]

[1]NA when control tower closed.
[2]Category D, 800-2¼.
[3]NA when local weather not available.

THE DALLES, OR

COLUMBIA GEORGE RGNL/
THE DALLES MUNI ..... **RNAV (GPS)-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1200-3.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY
RGNL ..... **ILS or LOC Rwy 25[1]**
NDB Rwy 25
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 25
VOR Rwy 7[2]

NA when local weather not available.
[1]ILS, Category D, 700-2; Category E, 900-3. LOC, Category E, 900-3.
[2]Category C, 800-2¼; Category D, 800-2½.

WALLA WALLA, WA

WALLA WALLA RGNL ..... **ILS or LOC Rwy 20[1]**
NDB Rwy 20, 1000-3
RNAV (GPS) Rwy 2[23]
RNAV (GPS) Rwy 16[2]
RNAV (GPS) Rwy 20[2]
VOR/DME Rwy 2[2]

[1]ILS,LOC, Categories A,B, 1100-2; Categories C, D, 1100-3.
[2]Category D, 800-2½.
[3]NA when local weather not available.

NAME ALTERNATE MINIMUMS

WENATCHEE, WA

PANGBORN
MEMORIAL ..... **ILS Y Rwy 12,** 1300-4
VOR/DME-C[12]
VOR/DME-A[3]

[1]NA when local weather not available.
[2]Categories A, B, 1500-2; Categories C, D, 1500-3.
[3]Categories A, B, 2000-2; Categories C, D, 2000-3.

WOLF POINT, MT

L.M. CLAYTON ..... **RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29

NA when local weather not available.

WORLAND, WY

WORLAND MUNI ..... **VOR or GPS Rwy 16**
Categories C,D, 800-2½.

YAKIMA, WA

YAKIMA AIR TERMINAL/
MCALLISTER FIELD ..... **ILS Y Rwy 27[12]**
ILS Z Rwy 27[13]
LOC/DME BC-B[14]
RNAV (GPS) Y Rwy 27[5]
RNAV (GPS) Z Rwy 27[4]
VOR/DME or TACAN Rwy 27[6]
VOR-A[7]

[1]NA when control tower closed.
[2]ILS, Categories A, B, 600-2¼; Category C, 700-2¼; Category D, 800-2¼.
[3]Category C, 700-2; Category D, 800-2¼
[4]Category D, 800-2¼.
[5]Category C, 800-2½; Category D, 800-2¾.
[6]Categories A, B, 1100-2; Categories C, D, 1100-3.
[7]Category C, 800-2¼; Category D, 800-2½.

INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME TAKE-OFF MINIMUMS

AFTON, WY

AFTON MUNI

DEPARTURE PROCEDURE: **Rwy 16,** Use LUNDI DEPARTURE. **Rwy 34,** use AFTON DEPARTURE.

ALBANY, OR

ALBANY MUNI

DEPARTURE PROCEDURE: **Rwy 16,** turn right. **Rwy 34**, turn left. **All aircraft** climb direct CVO VOR/DME and continue climb in CVO VOR/DME holding pattern, (E, right turns, 261° inbound) to cross CVO VOR/DME at or above 3000.

ANACONDA, MT

BOWMAN FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** std. w/ min. climb of 417' per NM to 9000, or 2800-3 for climb in visual conditions. **Rwy 17,** std. w/ min. climb of 321' per NM to 10200, or 2800-3 for climb in visual conditions. **Rwy 22,** NA-obstacles. **Rwy 35,** std. w/ min. climb of 369' per NM to 9100, or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 35,** climbing right turn to 10200 via heading 130° and CPN VOR/DME R-340 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NAME TAKE-OFF MINIMUMS

BOWMAN FIELD(CON'T)

Rwy 17, climbing left turn to 10200 via heading 100° and CPN VOR/DME R-335 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NOTE: **Rwy 17,** multiple trees beginning 865' from departure end of runway, 243' left of centerline, up to 70' AGL/5097' MSL. Rod on hangar 570' from departure end of runway, 278' left of centerline, 54' AGL/5054' MSL. Multiple trees beginning 787' from departure end of runway, 165' right of centerline, up to 70' AGL/5098' MSL. Multiple transmission lines beginning 4602' from departure end of runway, 1664' right of centerline, 80' AGL/5159' MSL. **Rwy 35,** multiple transmission lines beginning 2242' from departure end of runway, 964' left of centerline, up to 80' AGL/5159' MSL.

ARCO, ID

ARCO-BUTTE COUNTY (AOC)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6,** NA - Obstacles.

DEPARTURE PROCEDURE: Use JATTS DEPARTURE.

ARLINGTON, WA

ARLINGTON MUNI

TAKE-OFF MINIMUMS: **Rwy 11,** 600-2 or std. with a min. climb of 350' per NM to 700. **Rwy 34,** 500-2 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 11,** turn right. **Rwy 16**, climb direct to WATON LOM. **Rwys 29,34**, turn left. **All aircraft** climb direct to WATON LOM. Aircraft departing WATON LOM on bearings 150° CW 200° and bearings 260° CW 340° from WATON LOM continue climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 4500 then continue climb on course. Aircraft departing WATON LOM on bearings 200° CW 260° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 1500 then continue climb on course.

ASTORIA, OR

ASTORIA RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 800-3 or std. with a min. climb of 320' per NM to 900. **Rwy 13**, 700-2 or std. with a min. climb of 350' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 8,31,** turn left. **Rwy 13**, climb runway heading to 800 then climbing right turn. **Rwy 26**, turn right. Aircraft departing northwestbound climb via AST R-290 on course. **All other aircraft** climb to 1500 or above via AST R-290 then left turn to AST VOR/DME and continue climbing on course.

AUBURN, WA

AUBURN MUNI

DEPARTURE PROCEDURE: Use AUBURN DEPARTURE.

AURORA, OR

AURORA STATE

DEPARTURE PROCEDURE: **Rwy 17**, turn right, thence... **Rwy 35**, turn left, thence... ...Aircraft proceeding via V23 climb on course; All others climb in UBG VOR/DME holding pattern (hold south, left turn, 003° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight.

NOTE: **Rwy 17,** multiple trees 31' from departure end of runway, 273' right of centerline, up to 90' AGL/270' MSL. Multiple trees beginning 979' from departure end of runway, 247' right of centerline up to 113' AGL/316' MSL. Road 254' from departure end of runway, 350' left of centerline, 16' AGL/209' MSL. **Rwy 35,** multiple trees and road beginning 31' from departure end of runway, 163' left of centerline, up to 138' AGL/329' MSL. Multiple trees beginning 973' from departure end of runway, 281' right of centerline, up to 58' AGL/253' MSL.

BAKER, MT

BAKER MUNI

NOTE: **Rwy 13,** 51' derrick 2200' from departure end of runway on centerline. 100' trees south of airport, near runway, various locations. **Rwy 31,** 146' antenna on tower 4000' from departure end of runway, 1800' left of centerline. 114' rod on OL antenna 3800' from departure end of runway on centerline.

BAKER CITY ,OR

BAKER CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 8**, 900-2 or std. with a min. climb of 315' per NM to 6000, (788' per min. at 150K, 1050' per min. at 200K, 1313' per min. at 250K). **Rwy 13**, 1400-2 or std. with a min. climb of 310' per NM to 6000 (775' per min. at 150K, 1033' per min. at 200K, 1292' per min. at 250K). **Rwy 17**, NA. **Rwy 31**, 1300-2 or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K). **Rwy 35**, CAT C,D 1000-2; or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K).

DEPARTURE PROCEDURE: **Rwys 8,13**, turn left. **Rwys 26,31,35,** turn right. **All aircraft** climb direct BKE VOR/DME. Continue climb in BKE holding pattern (SE, right turns, 298° inbound) to cross BKE VOR/DME at or above MCA or MEA for route of flight.

BELLINGHAM, WA

BELLINGHAM INTL

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 160° to 600, then climbing right turn direct HUH VORTAC. Do not exceed 210 KIAS until established northbound. **Rwy 34,** climb heading 340° to 600, then climbing left turn to intercept HUH R-145 to HUH VORTAC, continue climb in holding pattern (northwest, right turn, 149° inbound) to MEA as appropriate for direction of flight.

NOTE: **Rwy 16,** lighted windsock 9' from departure end of runway, 259' right of centerline, 16' AGL/181' MSL. Multiple trees beginning 747' from departure end of runway, 405' right of centerline, up to 68' AGL/213' MSL. Multiple trees beginning 1128' from departure end of runway, 57' left of centerline, up to 104' AGL/249' MSL. **Rwy 34,** lighted windsock 93' from departure end of runway, 516' right of centerline, 27' AGL/169' MSL. multiple trees beginning 1372' from departure end of runway, 619' right of centerline, up to 134' AGL/246' MSL.

BEND, OR

BEND MUNI (BDN)
AMDT 4 09183 (FAA)

DEPARTURE PROCEDURE: Use BEND DEPARTURE.

BIG PINEY, WY

MILEY MEMORIAL FIELD

TAKE-OFF MINIMUMS: **Rwys 8,26,** NA.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 8400 via BPI R-124. **Rwy 31,** climb to 10800 via BPI R-320 thence all aircraft climb on course.

BILLINGS, MT

BILLINGS LOGAN INTL (BIL)
AMDT 5 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10R,** NA- Obstacles.

DEPARTURE PROCEDURE: **Rwy 10L,** Climb heading 098° to 4600 before turning right.

NOTE: **Rwy 10L,** fence 466' from departure end of runway, 535' right of centerline, 11' AGL/3511' MSL, cars on road, beginning from 624' from departure end of runway, 427' right of centerline, 15' AGL/3523' MSL, ground beginning 21' from departure end of runway, 499' right of centerline, 0' AGL/3505' MSL. **Rwy 25,** airport security fence, abeam departure end of runway, 500' left of centerline, 11' AGL/3672' MSL to 1200' from departure end of runway, abeam rwy centerline, 11' AGL/3672' MSL.

BLACKFOOT, ID

MCCARLEY FIELD

DEPARTURE PROCEDURE: **Rwy 1,** climb to 7000 (or higher assigned altitude) direct IDA VOR/DME, before proceeding on course. **Rwy 19,** climb to 7000 (or higher assigned altitude) direct PIH VORTAC, before proceeding on course.

BOISE, ID

BOISE AIR TERMINAL / GOWEN FIELD (BOI)
AMDT 6 10042 (FAA)

DEPARTURE PROCEDURE: Use GOWEN DEPARTURE.

BOZEMAN,MT

GALLATIN FIELD (BZN)
AMDT 3 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA-ATC.

DEPARTURE PROCEDURE: **Rwys 12, 30,** use BOZEMAN DEPARTURE.

BREMERTON,WA

BREMERTON NATIONAL (PWT)
AMDT 3 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1,** 300-1 or std. w/ min. climb of 410' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 1,** Climbing right turn to 6000 direct CAN NDB, Thence...**Rwy 19,** Climb to 6000 direct CAN NDB, thence...

...Continue climb-in-hold (S, LT, 013° inbound) to 6000 before proceeding on course.

NOTES: **Rwy 1,** Multiple bushes 380' from departure end of runway, 522' left of centerline, up to 17' AGL/456' MSL, multiple trees and poles beginning 1210' from departure end of runway, 622' left of centerline, up to 100' AGL/561' MSL, multiple trees and bushes 1012' from departure end of runway, 708' right of centerline, up to 100' AGL/495' MSL. **Rwy 19,** Multiple trees beginning 176' from departure end of runway, 337' left of centerline, up to 100' AGL/514' MSL, multiple trees beginning 371' from departure end of runway, 277' right of centerline, up to 100' AGL/548' MSL.

BUFFALO,WY

JOHNSON COUNTY

TAKE-OFF MINIMUMS: Northbound aircraft: **Rwys 13,31,** 2400-2 or std. with a min. climb of 300' per NM to 7500. Southbound aircraft: **Rwy 31**, 400-2 or std. with a min climb of 300' per NM to 6000.

DEPARTURE PROCEDURE: Northbound aircraft: **Rwy 13**, turn left. **Rwy 31,** climb straight ahead. **All aircraft** proceed via SHR R-139 to SHR VORTAC. Southbound aircraft: **Rwy 13,** climb straight ahead. **Rwy 31,** turn right. **All aircraft** proceed via CZI R-319 to CZI VOR/DME.

BURLEY, ID

BURLEY MUNI (BYI)
AMDT 5 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwy 24,** 300-1½ or std. w/ min. climb of 428' per NM to 4500.

DEPARTURE PROCEDURE: **Rwy 2,** climbing left turn direct BYI VOR/DME, continue climb in BYI VOR/DME holding pattern (hold Northwest right turns, 125° inbound) to cross BYI VOR/DME at or above MEA for route of flight. **Rwy 6,** climbing left turn direct BYI VOR/DME, continue climb in BYI VOR/DME holding pattern (hold Northwest right turns, 125° inbound) to cross BYI VOR/DME at or above MEA for route of flight. **Rwy 20,** climbing right turn direct BYI VOR/DME, continue climb in BYI VOR/DME holding pattern (hold Northwest right turns, 125° inbound) to cross BYI VOR/DME at or above MEA for route of flight. **Rwy 24,** climbing right turn direct BYI VOR/DME, continue climb in BYI VOR/DME holding pattern (hold Northwest right turns, 125° inbound) to cross BYI VOR/DME at or above MEA for route of flight.

NOTE: **Rwy 2,** obstruction light on bridge 252' from DER, 513' left of centerline, 57' AGL/4195' MSL. Trees beginning 686' from DER, 201' right of centerline, up to 35' AGL/4184' MSL. Tree 694' from DER, 375' left of centerline, 29' AGL/4178' MSL. Obstruction light on building 736' from DER, 188' left of centerline, 11' AGL/4161' MSL. Tower 803' from DER, 590' left of centerline, 55' AGL/4204' MSL. Vehicles on road beginning 857' from DER, 1' right of centerline, up to 17' AGL/4168' MSL. Poles beginning 1226' from DER, 549' left of centerline, up to 72' AGL/4222' MSL. Building vent 1240' from DER, 164' left of centerline, 27' AGL/4177' MSL. Stack 2206' from DER, 856' right of centerline, 86' AGL/4236' MSL. Stack 2573' from DER, 614' left of centerline, 86' AGL/4236' MSL. Elevators beginning 3980' from DER, 131' right of centerline, up to 133' AGL/4283' MSL. **Rwy 6,** trees beginning 46' from DER, 172' right of centerline, up to 14' AGL/4163' MSL. Rising terrain beginning 49' from DER, 326' right of centerline, up to 4149' MSL. Bush 150' from DER, 103' right of centerline, 5' AGL/4147' MSL. Antenna 586' from DER, 398' left of centerline, 15' AGL/4165' MSL. Obstruction light on bridge 1061' from DER, 80' right of centerline, 39' AGL/4179' MSL.

BURLEY MUNI (BYI) (CON'T)

Rwy 20, obstruction light pole 42' from DER, 124' left of centerline,16' AGL/4170' MSL. Railroad beginning 65' from DER, 4' left of centerline, up to 23' AGL/4177' MSL. Sign 181' from DER, 121' right of centerline, 18' AGL/ 4172' MSL. Vehicles on road 162' from DER, 2' left of centerline, 17'AGL/4169' MSL. Vehicles on road beginning 335' from DER 348' right of centerline up to 17' AGL/4171' MSL. Pole 446' from DER, 210' right of centerline, 26' AGL/4180' MSL. Antenna 523' from DER, 337' right of centerline, 63' AGL/4217' MSL. Tree 586' from DER, 213' right of centerline, 28' AGL/4182' MSL. Trees beginning 2014' from DER, 339' left of centerline, up to 96' AGL/4251' MSL.

Rwy 24, vehicles on road beginning 25' from DER, 9' left of centerline, up to 15' AGL/4169' MSL. Fence 58' from DER, 8' left of centerline, 4' AGL/4154' MSL. Rising terrain beginning 69' from DER, 201' right of centerline, up to 4154' MSL. Railroad 152' from DER, 6' left of centerline, 23' AGL/4176' MSL. Trees beginning 427' from DER, 101' right of centerline, up to 69' AGL/4223' MSL. Vehicles on road beginning 509' from DER, 586' right of centerline, up to 15' AGL/4169' MSL. Railroad beginning 568' from DER, 288' right of centerline, up to 23' AGL/4177' MSL. Pole 735' from DER, 185' left of centerline, 18' AGL/4172' MSL. Light standard 824' from DER, 58' right of centerline, 23' AGL/4177' MSL. Antenna 1630' from DER, 112' left of centerline, 58' AGL/4212' MSL. Tower 2766' from DER, 175' left of centerline,123' AGL/4282' MSL. Tower 3570' from DER, 158' right of centerline, 157' AGL/4312' MSL. Obstruction light on elevators beginning 3115' from DER, 164' left of centerline, up to 184' AGL/4344' MSL.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL (BVS)
ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 340' per NM to 3600. **Rwy 10**, 1700-2 or std. with a min. climb of 245' per NM to 2300. **Rwy 22**, 1300-2 or std. with a min. climb of 210' per NM to 1800.

DEPARTURE PROCEDURE: **Rwys 4,10,22**, turn right heading 280°. **Rwy 28**, climb runway heading.

All aircraft climb to 2500 then turn right direct BVS NDB to cross BVS at or above 4500. Aircraft departing on BVS R-145 CW R-330 climb on course. All others continue climbing in BVS holding pattern (NW, right turns 113° inbound) to cross BVS at or above 6800 before proceeding on course.

NOTE: **Rwy 4,** tree 2581' from departure end of runway, 426' left of centerline, 100' AGL/212' MSL. Light pole 1489' from departure end of runway, 136' left of centerline 35' AGL/137' MSL. Bush 126' from departure end of runway, 430' right of centerline, 20' AGL/101' MSL. Building 2925' from departure end of runway, 130' left of centerline, 60' AGL/180' MSL.

BURNS, OR

BURNS MUNI

DEPARTURE PROCEDURE: **Rwy 3,** climbing right turn, thence... **Rwy 12**, climb to 4600 via heading 117°, thence... **Rwys 21, 30,** climbing left turn, thence... ...All aircraft departing on ILR R-072 CW R-209, climb on course. All others climb on ILR R-123 within 10 NM to cross ILR VOR/DME at or above 5000.

NOTE: **Rwy 21,** pole 820' from departure end of runway, 357' left of centerline, 20' AGL/4169' MSL.

BUTTE, MT

BERT MOONEY

TAKE-OFF MINIMUMS: **Rwy 11**, NA-obstacles. **Rwy 15,** std. w/ min. climb of 601' per NM to 7300, or 3300-3 for climb in visual conditions. **Rwy 29,** std. w/ min. climb of 832' per NM to 6700, or 3300-3 for climb in visual conditions. **Rwy 33,** std. w/ min. clim b of 355' per NM to 6800, or 3300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15,** climbing right turn direct CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . **Rwy 29,** climb heading 293° to intercept CPN VOR/DME R-082 to CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . . **Rwy 33,** climb direct CPN VOR/DME, or for climb in visual condtions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .

. . .climb in CPN VOR/DME holding pattern (hold north, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA before proceeding enroute.

NOTE: **Rwy 15,** multiple trees beginning 2 NM from departure end of runway, 1779' right of centerline, up to 100' AGL/6659' MSL. Tree 2.1 NM from departure end of runway, 66' left of centerline, 100' AGL/5934' MSL. **Rwy 29,** multiple trees and poles beginning 364' from departure end of runway, 7' right of centerline, up to 100' AGL/5621' MSL. Multiple trees and lights beginning 322' left of centerline, up to 100' AGL/5582' MSL. Terrain and numerous trees beginning 1.2 NM from departure end of runway, 1022' left of centerline, up to 100' AGL/6 379' MSL. **Rwy 33,** flag pole 1095' from departure end of runway, 730' left of centerline, 64' AGL/ 5583' MSL.

CALDWELL, ID

CALDWELL INDUSTRIAL

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 300' per NM to 5600, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb via heading 119° to 5600 before proceeding on course. For climb in visual conditions: Cross Caldwell Industrial Airport at or above 4800 before proceeding on course. **Rwy 30,** climb via heading 299° to 4400 before proceeding on course.

NOTE: **Rwy 12,** levee 198' from departure end of runway, 281' left of centerline, 0' AGL/2451' MSL. Multiple trees 1462' from departure end of runway, 877' right of centerline, up to 100' AGL/2505' MSL. **Rwy 30,** multiple poles 206' from departure end of runway, 389' right of centerline, up to 39' AGL/2457' MSL. Rod 353' from departure end of runway, 246' right of centerline, 21' AGL/2439' MSL.

CASPER, WY

CASPER/NATRONA COUNTY INTL (CPR)
AMDT 3A 09155 (FAA)

DEPARTURE PROCEDURE: **Rwys 3,8,12**, turn left. **All other runways,** turn right. **All aircraft** climb direct DDY VORTAC before proceeding on course, or comply with published Casper SIDs.

CHEHALIS, WA

CHEHALIS-CENTRALIA

DEPARTURE PROCEDURE: **Rwy 16,** climb to 1000 via heading 160° then climbing left turn to 4000 via heading 001° and OLM R-151 to OLM VORTAC before proceeding on course. **Rwy 34,** climb to 4000 via heading 340° and OLM R-176 to OLM VORTAC before proceeding on course.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD

NOTE: **Rwy 13,** multiple trees beginning 74' from departure end of runway, 115' left of centerline, up to 40' AGL/6166' MSL. Multiple trees, pole, and fence beginning 34' from departure end of runway, 167' right of centerline, up to 40' AGL/6154' MSL. **Rwy 27,** multiple trees and poles beginning 525' from departure end of runway, 271' left of centerline, up to 40' AGL/6216' MSL. Multiple trees and poles beginning 1222' from departure end of runway, 275' right of centerline, up to 40' AGL/6211' MSL. **Rwy 31.** multiple trees, road, fence and sign beginning 196' from departure end of runway, 76' left of centerline, up to 40' AGL/6238' MSL. Multiple poles and sign beginning 407' from departure end of runway, 8' left of centerline, up to 69' AGL/6229' MSL.

CODY, WY

YELLOWSTONE RGNL (COD)
AMDT 4 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** std. with a min. climb of 400' per NM to 8000' or 4200-3 for climb in visual conditions. **Rwy 22,** std. with a min. climb of 385' per NM to 7400' or 4200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 038° to 5900, then climbing left turn via COD R-171 to COD VOR/DME or for climb in visual conditions to cross Yellowstone Rgnl at or above 9400, then via COD R-189 to COD VOR/DME to cross COD VOR/DME at or above MEA for route of flight. **Rwy 22,** climb heading 218° to 6600, then climbing left turn via COD R-180 to COD VOR/DME or for climb in visual conditions to cross Yellowstone Rgnl at or above 9400, then via COD R-189 to COD VOR/DME to cross COD VOR/DME at or above MEA for route of flight.

NOTE: **Rwy 4,** trees beginning 100' from DER, 262' right of centerline, up to 79' AGL/5199' MSL. Rising terrain beginning 1723' from DER, 304' right of centerline, up to 5146' MSL. **Rwy 22,** poles beginning 1 NM from DER, 406' right of centerline, up to 60' AGL/5332' MSL. Rising terrain beginning 1 NM from DER, 109' right of centerline, up to 6235' MSL. Rising terrain beginning 5074' from DER, 131' left of centerline, up to 5428' MSL.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)
AMDT 9 10042 (FAA)

DEPARTURE PROCEDURE: use COEUR D'ALENE DEPARTURE.

COLSTRIP, MT

COLSTRIP (M46)
AMDT 2 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6** use CISPU (RNAV) DEPARTURE. **Rwy 24,** use CONUK (RNAV) DEPARTURE.

CONRAD, MT

CONRAD

DEPARTURE PROCEDURE: **Rwy 24,** climb runway heading to 4300, then continue climb on course.

CORVALLIS, OR

CORVALLIS MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** std. with a min. climb of 290' per NM to 3100 or 1700-3 for climb in visual conditions. **Rwy 27,** std. with a min. climb of 310' per NM to 3100 or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 9, 17,** climbing left turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400. **Rwys 27, 35,** climbing right turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400.

...climb in CVO VOR/DME holding pattern (E, RT, 261° inbound) to depart at or above 3400.

NOTE: **Rwy 9,** multiple trees and railroad beginning 549' from departure end of runway, 254' left of centerline, up to 153' AGL/383' MSL. Multiple trees and railroad beginning 670' from departure end of runway, 5' right of centerline, up to 135' AGL/380' MSL. **Rwy 27,** obstruction light on glideslope 409' from departure end of runway, 325' left of centerline, 28' AGL/273' MSL. **Rwy 35,** multiple trees beginning 470' from departure end of runway, 544' left of centerline up to 36' AGL/276' MSL.

COWLEY/LOVELL/BYRON, WY

NORTH BIG HORN COUNTY

DEPARTURE PROCEDURE: **Rwys 9, 27**, aircraft departing via HCY NDB bearings 130° CW 225° climb on course, all others climb in HCY NDB holding pattern (W, right turns, 078° inbound) to cross HCY NDB at or above 9000.

DEER PARK, WA

DEER PARK (DEW)
AMDT 1 10098 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34,** 300-1½ or std. with a min. climb of 455' per NM to 2500.

DEPARTURE PROCEDURE: **Rwy 4,** climbing right turn heading 165° and GEG VORTAC R-006 to GEG VORTAC. **Rwy 16,** climb heading 164° and GEG VORTAC R-006 to GEG VORTAC. **Rwy 22,** climbing left turn heading 155° and GEG VORTAC R-006 to GEG VORTAC. **Rwy 34,** climbing right turn heading 165° and GEG VORTAC R-006 to GEG VORTAC.

NOTE: **Rwy 4,** aircraft 261' from DER, 511' left of centerline, up to 21' AGL/2210' MSL. Trees beginning 1809' from DER, 413' left of centerline, up to 109' AGL/2299' MSL. Aircraft 104' from DER, 186' right of centerline, up to 21' AGL/2200' MSL. Trees beginning 1667' from DER, 373' right of centerline, up to 116' AGL/2319' MSL. **Rwy 16,** trees beginning 31' from DER, 455' left of centerline, up to 109' AGL/2279' MSL. Trees beginning 2587' from DER, 621' right of centerline, up to 104' AGL/2264' MSL. **Rwy 22,** trees beginning 1461' from DER, 211' right of centerline, up to 90' AGL/2270' MSL. **Rwy 34,** aircraft 23' from DER, 218' left of centerline, up to 21' AGL/2230' MSL. Trees beginning 2678' from DER, 18' left of centerline, up to 165' AGL/2375' MSL. Vehicles beginning 74' from DER, 339' right of centerline, up to 15' AGL/2234' MSL. Trees beginning 2219' from DER, 260' right of centerline, up to 100' AGL/2382' MSL.

DILLON, MT

DILLON

TAKE-OFF MINIMUMS: **Rwys 3,21,** NA.

DEPARTURE PROCEDURE: **Rwys 16,34**, turn right, climb in DLN VOR/DME holding pattern (N, right turns, 185° inbound) to cross DLN VOR/DME at or above; northwestbound V257 8500; southwestbound V121 8500; northbound V21 7600; southeastbound V21, V257 9400.

DOUGLAS, WY

CONVERSE COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 300-2 or std. with a min. climb of 250' per NM to 5200. **Rwy 23,** 1700-3 or std. with a min. climb of 260' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn via IIP VOR/DME R-342 to IIP VOR/DME. **Rwy 11,** climbing right turn via IIP VOR/DME R-312 to IIP VOR/DME. **Rwy 23,** climbing left turn via IIP VOR/DME R-264 to IIP VOR/DME. **Rwy 29,** climbing right turn via IIP VOR/DME R-325 to IIP VOR/DME. **All aircraft** departing IIP R-253 CW R-180 climb on course. All others continue climb in IIP VOR/DME holding pattern (NW, left turns, 125° inbound) to cross IIP VOR/DME at or above: R-181 CW R-199 9600; R-200 CW R-252 8000.

NOTE: **Rwy 5,** trees 1883' from departure end of runway, 549' right of centerline, 35' AGL/5014' MSL. Trees 3407' from departure end of runway, 209' right of centerline, 35' AGL/5074' MSL. Trees 5458' from departure end of runway, 1954' right of centerline, 35' AGL/5132' MSL. **Rwy 23,** trees 2068' from departure end of runway, 1008' left of centerline, 35' AGL/4994' MSL. Trees 3130' from departure end of runway, 1215' left of centerline, 35' AGL/5014' MSL.

DRIGGS, ID

DRIGGS-REED MEMORIAL (DIJ)
AMDT 2 08157 (FAA)

DEPARTURE PROCEDURE: Use LAMON DEPARTURE.

EASTSOUND, WA

ORCAS ISLAND (ORS)
AMDT 1 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** NA-Terrain. **Rwy 34,** 500-3 or std. w/ min. climb of 224' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 34,** climbing right turn to 2000 to intercept HUH VORTAC R-210 to HUH VORTAC, then climb-in-hold (hold South, Left turns, 352° inbound) to cross HUH VORTAC at or above 3800 before proceeding on course.

NOTE: **Rwy 34,** trees beginning 330' from DER, 411' left of centerline, up to 120' AGL/139' MSL.

ELLENSBURG, WA

BOWERS FIELD

TAKE-OFF MINIMUMS: **Rwys 7,11,** 4600-3 or std. with a min. climb of 290' per NM to 7800. **Rwy 25,** 4700-3 or std. with a min. climb of 340' per NM to 7800. **Rwy 29,** 4600-3 or std. with a min. climb of 320' per NM to 7800.

DEPARTURE PROCEDURE: **Rwys 7, 29,** climbing right turn direct ELN VORTAC. **Rwys 11, 25,** climbing left turn direct ELN VORTAC. **All aircraft,** continue climbing in the ELN VORTAC holding pattern (W, right turns, 087° inbound) to MEA/MOCA for route of flight.

EPHRATA, WA

EPHRATA MUNI (EPH)
AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 027° to 2300 before proceeding on course. **Rwy 11,** climb heading 112° to 2200 before proceeding on course. **Rwy 21,** climb heading 207° to 2800 before proceeding on course.

EUGENE, OR

MAHLON SWEET FIELD

DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climb to 1000 then climbing right turn... **Rwys 34L, 34R,** climb to 1000 then climbing left turn...

...all aircraft climb direct EUG VORTAC, then climb in EUG VORTAC holding pattern (hold north, right turn, 175° inbound) to cross EUG VORTAC at or above MEA altitude before proceeding enroute.

NOTE: **Rwy 16R,** tree 1992' from departure end of runway, 832' left of centerline, 50' AGL/419' MSL. **Rwy 16L,** multiple trees and power poles beginning 872' from departure end of runway, 35' right of centerline, up to 50' AGL/437' MSL, multiple trees and power poles beginning 890' from departure end of runway, 77' left of centerline, up to 50' AGL/433' MSL. **Rwy 34R,** multiple trees beginning 2869' from departure end of runway, 186' right of centerline, up to 50' AGL/447' MSL. Tree 2535' from departure end of runway, 652' left of centerline, 50' AGL/428' MSL.

EVANSTON, WY

EVANSTON-UINTA COUNTY BURNS FIELD

DEPARTURE PROCEDURE: **Rwy 5**, climb via heading 050° and FBR VOR/DME R-243 to FBR VOR/DME.

Rwy 23, climbing left turn via heading 030° and FBR VOR/DME R-243 to FBR VOR/DME.

All aircraft: cross FBR VOR/DME at or above MEA for direction of flight.

EVERETT, WA

SNOHOMISH COUNTY (PAINE FIELD)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 353' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 11, 16L/R,** climbing right turn, thence...**Rwys 29, 34L/R,** climbing left turn, thence...

...for aircraft departing via V287 west bound, climb via PAE VOR/DME R-236 to 3000. All others, climb direct PAE VOR/DME, climb in PAE VOR/DME holding pattern (NW, RT, 149° inbound) to MEA for route of flight before proceeding on course.

NOTE: **Rwy 11,** multiple antennas on building, rod on obstruction light, and trees beginning 326' from departure end of runway, 387' right of centerline, up to 85' AGL/664' MSL. Tree 1156' from departure end of runway, 600' left of centerline, 93' AGL/672' MSL. **Rwy 16L,** multiple trees and pole beginning 588' from departure end of runway, 220' left of centerline, up to 118' AGL/697' MSL. Multiple trees, pole, and building beginning 449' from departure end of runway, 162' right of centerline, up to 78' AGL/657' MSL. **Rwy 16R,** multiple trees beginning 1228' from departure end of runway, 168' left of centerline, up to 140' AGL/699' MSL. Multiple trees beginning 707' from departure end of runway, 158' right of centerline, up to 118' AGL/687' MSL. **Rwy 29,** multiple trees beginning 45' from departure end of runway, 66' left of centerline, up to 111' AGL/630' MSL. Multiple trees beginning 343' from departure end of runway, 44' right of centerline, up to 110' AGL/689' MSL. **Rwy 34R,** multiple trees and pole beginning 3340' from departure end of runway, 180' right of centerline, up to 95' AGL/674' MSL. Tree 5762' from departure end of runway, 221' left of centerline, 103' AGL/682' MSL.

FAIRCHILD AFB (KSKA)

SPOKANE, WA . . . . . ORIG, 08017

DEPARTURE PROCEDURES: **Rwy 5**, climb on track 048° to intercept SKA R-045 to 5300, then on course. **Rwy 23**, climb on track 241° to 3400, then on course.

TAKE-OFF OBSTACLES: **Rwy 23**, Terrain 2468' MSL, 194' from DER, 405' right of centerline. Terrain 2477' MSL, 461' from DER, 751' right of centerline. Terrain 2477' MSL, 509' from DER, 750' right of centerline.

FORT BENTON, MT

FORT BENTON

TAKE-OFF MINIMUMS: **Rwys 5, 23,** std. w/ min. climb of 274' per NM to 8900 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 5, 23,** for climb in visual conditions: Cross Fort Benton Airport at or above 8900 MSL before proceeding on course.

FORT BRIDGER, WY

FORT BRIDGER

DEPARTURE PROCEDURE: **All aircraft** climb direct FBR VOR/DME. Aircraft departing; FBR R-210 CW R-135 climb on course; FBR R-136 CW R-209 cross FBR VOR/DME at or above 9000. (Hold NE, right turns, 215° inbound).

FRIDAY HARBOR, WA

FRIDAY HARBOR

TAKE-OFF MINIMUMS: **Rwy 34,** 500-1.

DEPARTURE PROCEDURE: Aircraft departing FHR NDB **Rwy 34,** climbing right turn direct FHR NDB, then climb on course. All other aircraft climb on course.

GILLETTE, WY

GILLETTE-CAMPBELL COUNTY (GCC)

AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 275' per NM to 5600, or 1200-3 for climb in visual conditions. **Rwy 21,** 600-3 or std. w/ min. climb of 425' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 158° to 5100, before proceeding on course or, for climb in visual conditions cross Gillette-Campbell County airport at or above 5400 before proceeding on course. **Rwy 21,** climb via heading 206° to 5200, before proceeding on course.

NOTE: **Rwy 3,** windsock 1415' from DER, 100' left of centerline, 24' AGL/4366' MSL. Trees beginning 1976' from DER, 267' right of centerline, up to 30' AGL/4409' MSL. **Rwy 16,** tower and poles beginning 1.61 NM from DER, 1264' left of centerline, up to 57' AGL/4696' MSL. Post and trees beginning 1.77 NM from DER, 300' right of centerline, up to 51' AGL/4789' MSL. **Rwy 21,** fence 328' from DER, 267' left of centerline, 7' AGL/4352' MSL, trees 2077' from DER, 1011' right of centerline, 30' AGL/4449' MSL, tree 7029' from DER, 2378' right of centerline, 30 ' AGL/4729' MSL. **Rwy 34,** fence 1236' from DER, 723' left of centerline, 16' AGL/4380' MSL. Vehicle on road 1609' from DER, 419' left of centerline, 15' AGL/4394 ' MSL. Trees 3093' from DER, 936' right of centerline, 30' AGL/4449 ' MSL. Vehicle on road 1610' from DER. 419' left of centerline, 15' AGL/4380' MSL.

GOODING, ID

GOODING MUNI (GNG)

ORIG 08269 (FAA)

DEPARTURE PROCEDURE: **Rwy 7,** climb heading 068° to 5000 before turning left. **Rwy 25,** climb heading 233° to 5600 before turning right.

NOTE: **Rwy 7,** rising terrain 59' from departure end of runway, 479' right of centerline, up to 3754' MSL. Fence line 653' from departure end of runway, 332' right of centerline, 12' AGL up to 3751' MSL. Bushes starting 877' from departure end of runway, 420' right of centerline, 20' AGL up to 3795' MSL. **Rwy 25,** vehicle on road, 91' from departure end of runway, 257' left of centerline, up to 10' AGL/3678' MSL.

GRANGEVILLE, ID
IDAHO COUNTY (S80)
AMDT 1 08157 (FAA)
TAKE-OFF MINIMUMS: **Rwy 7,** NA - Obstacles.
DEPARTURE PROCEDURE: **Rwy 25,** Use MELLR DEPARTURE.

GRANTS PASS, OR
GRANTS PASS
TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30,** 4000-3 or std. with a min. climb of 360' per NM to 5000.
DEPARTURE PROCEDURE: **Rwy 30,** climb via heading 320 until passing 5000, then climbing right turn direct RBG VOR/DME. Cross RBG VOR/DME at or above MEA for route of flight.

GRAY AAF (KGRF)
FORT LEWIS, WA . . . . AMDT 2, 10098
Rwy 15, Standard
Rwy 33, 300-1*
* Or standard with minimum climb of 430/NM to 600.
DEPARTURE PROCEDURE: **Rwy 15,** Climb heading 147° to 700 then climbing left turn direct GRF NDB.
Rwy 33, Climb direct GRF NDB. Aircraft departing 330° CW 070° and 135° CW 260° bearing from GRF NDB climb on course. All others continue climb in GRF NDB holding pattern (hold NW, RT, 147° inbound) to cross GRF NDB at or above: 071° CW 134° bearing from GRF NDB, 8500; 261° CW 329° bearing from GRF NDB, 1500.
TAKE-OFF OBSTACLES: **Rwy 15,** Tree 100' AGL/ 439' MSL, 1848' from DER, 430' right of centerline. **Rwy 33,** Tree 100' AGL/479' MSL, 3465' from DER, 1338' left of centerline.

GREAT FALLS, MT
GREAT FALLS INTL
NOTE: **Rwy 7,** obstruction light on lighted wind sock 237' from departure end of runway, 519' left of centerline, 34' AGL/3694' MSL. Obstruction light on building 2226' from departure end of runway, 614' left of centerline, 78' AGL/3738' MSL. Building on 681' from departure end of runway, 583' right of centerline, 48' AGL/3688' MSL. Multiple light poles beginning 1359' from departure end of runway, 440' right of centerline, up to 90' AGL/3746' MSL. **Rwy 21,** pole 1544' from departure end of runway, 791' left of centerline, 45' AGL/3725' MSL. **Rwy 25,** windmill 2.3 NM from departure end of runway, 4197' right of centerline, 338' AGL/4003' MSL.

GREYBULL, WY
SOUTH BIG HORN COUNTY (GEY)
ORIG-A 09239 (FA)
TAKE-OFF MINIMUMS: **Rwy 25,** 300-1 or std. w/ min. climb of 260' per NM to 4200.
DEPARTURE PROCEDURE: **All runways**, for departures on GEY bearings 320° CW 150°, climb in GEY NDB holding pattern to 9000 before departing on course, then continue climb to MEA or assigned altitude. Departures GEY bearings 150° CW 320° climb on course.
NOTE: **Rwy 25,** bush 4955' from DER, 1268' right of centerline, 2' AGL/4101' MSL.

GUERNSEY, WY
CAMP GUERNSEY
TAKE-OFF MINIMUMS: **Rwy 14,** 300-1 or std. with a min. climb of 320' per NM to 4700. **Rwy 32,** 1400-2 or std. with a min. climb of 320' per NM to 5800.
DEPARTURE PROCEDURE: **Rwy 14,** climb to 5600 via heading 150°. **Rwy 32,** climb to 5800 via heading 070°. **All aircraft** continue on course.

HAILEY, ID
FRIEDMAN MEMORIAL
TAKE-OFF MINIMUMS: **Rwy 13,** 2700-3 w/ min. climb of 307' per NM to 6400, or 3600-3 for climb in visual conditions. **Rwy 31,** NA-obstacles.
DEPARTURE PROCEDURE: **Rwy 13,** Climbing right turn heading 149°, then on 160° course to HLE NDB, or for climb in visual conditions: cross Friedman Memorial Airport at or above 8800 heading 151°, then on 151° course to HLE NDB.
NOTE: **Rwy 13,** multiple trees beginning 763' from departure end of runway, 3' right of centerline, up to 100' AGL/5345' MSL. Multiple trees beginning 1.3 NM from departure end of runway, 2587' right of centerline, up to 100' AGL/6099' MSL.

HAMILTON, MT
RAVALLI COUNTY
DEPARTURE PROCEDURE: Use HAMEY RNAV DEPARTURE.

HAVRE,MT
HAVRE CITY-COUNTY (HVR)
AMDT 3 09351 (FAA)
TAKE-OFF MINIMUMS: **Rwy 8,** 300-1¾ or std. w/ min. climb of 217' per NM to 3300.
DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 3300 then climbing left turn to 8000 direct HVR VOR/DME thence...**Rwy 8,** climb heading 077° to 3300 then climbing left turn to 8000 via HVR R-025 to HVR VOR/DME thence...**Rwy 21,** climb heading 212° to 3300 then climbing right turn to 8000 direct HVR VOR/ DME thence...**Rwy 26,** climb heading 257° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...
...continue climb in hold in HVR VOR/DME holding pattern (hold west, right turns, 094° inbound) to cross HVR VOR/DME at or above 8000 before proceeding on course.
NOTE: **Rwy 3,** pole 2682' from DER, 1044' left of centerline, 21' AGL/2680' MSL. **Rwy 8,** obstruction light on windsock 59' from DER, 224' left of centerline, 9' AGL/2588' MSL. Tree 1192' from DER, 752' left of centerline, 25' AGL/2610' MSL. Tank 1.3 NM from DER, 2287' left of centerline, 57' AGL/2797' MSL. **Rwy 26,** light on windsock, 50' from DER, 225' right of centerline, 9' AGL/2589' MSL. Trees beginning 1617' from DER, 650' right of centerline, 25' AGL/2659' MSL.

HELENA, MT

HELENA RGNL (HLN)
ADMT 9 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5,** 2500-3 or std. w/ min. climb of 250' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 9,** std. w/ min. climb of 240' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 23,** 1600-3 or std. w/ min. climb of 560' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 27**, 1600-3 or std. w/ min. climb of 390' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwys 16,34,** NA.

DEPARTURE PROCEDURE: **Rwys 5,9,** climbing left turn heading 270°. **Rwys 23,27,** climbing right turn heading 020°. **All Aircraft:** continue climb northwestbound via HLN R-318 to 8100, then climbing right turn direct HLN VORTAC, cross HLN VORTAC at or above 9000, before proceeding on course, or for climb in visual conditions: cross Helena Rgnl airport northbound at or above 5300 and continue climbing via HLN R-336 to WOKEN INT before proceeding on course.

NOTE: **Rwy 5,** ground beginning 5' from departure end of runway, 495' right of centerline, up to 3826' MSL. Fence beginning 423' from departure end of runway, 331' right of centerline, up to 10' AGL/3832' MSL. **Rwy 23,** pole 2198' from departure end of runway, 462' left of centerline, 76' AGL/3996' MSL, tree 1011' from departure end of runway, 379' left of centerline, 44' AGL/3964' MSL, rod on building 953' from departure end of runway, 321' left of centerline, 323' AGL/943' MSL, tree 1519' from departure end of runway, 142' right of centerline, 53' AGL/3953' MSL. **Rwy 27,** buildilng 1593' from departure end of runway, 731' left of centerline, 58' AGL/6385' MSL. Ground beginning 101' from departure end of runway, 346' left of centerline, up to 3871' MSL. Tree 1567' from departure end of runway, 616' left of centerline, 47' AGL/3906' MSL.

HERMISTON, OR

HERMISTON MUNI

NOTE: **Rwy 4,** tower 379' left of departure end of runway, 50' AGL/698' MSL. **Rwy 22,** light pole 456' left of departure end of runway, 44' AGL/684' MSL.

HOQUIAM, WA

BOWERMAN

TAKE-OFF MINIMUMS: **Rwy 6**, 600-2 or std. with a min. climb of 260' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn heading 110°: **Rwy 24,** climb runway heading. **All aircraft** climb to 600 continue climb on course.

HULETT, WY

HULETT MUNI (W43)
ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13,** std. w/ min. climb of 450' per NM to 6300, or 500-2¼ w/ min. climb of 295' per NM to 7700, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 7700 via heading 132° before proceeding on course, or climb in visual conditions: cross Hulett Muni Airport at or above 6300 before proceeding on course. **Rwy 31,** climbing right turn on a heading between 090° clockwise to 115° from departure end of runway to 7700 before proceeding on course.

NOTE: **Rwy 13,** road 398' from departure end of runway, 37' left of centerline, 15' AGL/4296' MSL, truck on road 1126' from departure end of runway, 346' right of centerline, 15' AGL/4334' MSL, trees beginning 4945' from departure end of runway, across centerline, up to 100' AGL/4657' MSL. **Rwy 31,** terrain 104' from departure end of runway, 420' left of centerline, 4200' MSL, terrain 344' from departure end of runway, 233' left of centerline, 4207' MSL.

IDAHO FALLS, ID

IDAHO FALLS RGNL (IDA)
AMDT 4 09351 (FAA)

DEPARTURE PROCEDURE: **All aircraft** departing IDA R-160 CW R-040 climb on course. **All others** climb direct IDA VOR/DME. Continue climb in IDA holding pattern (South, left turns, 019° inbound) to cross IDA VOR/DME at or above 7500 before proceeding on course.

NOTE: **Rwy 2,** pole 1039' from DER, 758' left of centerline, 42' AGL/4762' MSL. **Rwy 17,** trees, flagpole, building, light and vent on buildings, and vehicle on road beginning 29' from DER, 10' right of centerline, up to 84' AGL/4820' MSL. Trees and vent on building beginning 569' from DER, 22' left of centerline, up to 35' AGL/4760' MSL. Trees, antenna, and light poles beginning 1853' from DER, 26' right of centerline, up to 121' AGL/4851' MSL. **Rwy 35,** trees and railroad beginning 410' from DER, 503' right of centerline, up to 49' AGL/4769' MSL. Tree 1034' from DER, 715' left of centerline, 42' AGL/4762' MSL.

JACKSON,WY

JACKSON HOLE

DEPARTURE PROCEDURE: **Rwy 1,** use GEYSER DEPARTURE. **Rwy 19,** use TETON DEPARTURE.

JEROME, ID

JEROME COUNTY (JER)
AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** 500-1¾ or std. w/ min. climb of 435' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 9,** climb heading 086° to 5300 before proceeding on course. **Rwy 27**, climb heading 266° to 4800 before proceeding on course.

NOTE: **Rwy 9,** bush 140' from DER, 500' left of centerline, 16' AGL/4076' MSL. Poles starting 1432' from DER, 32' left of centerline, up to 47' AGL/4169' MSL. Sign 1473' from DER, 547' left of centerline, 49' AGL/4119' MSL. Obstruction light on building 1510' from DER, 6' left of centerline, 43' AGL/4103' MSL. Trees starting 1651' from DER, 100' left of centerline, up to 53' AGL/4137' MSL. Building 2186' from DER, 173' left of centerline, 29' AGL/4119' MSL. Rising terrain starting 2549' from DER, 560' left of centerline, up to 4219' MSL. AG equip 4752' from DER, 517' left of centerline, 26' AGL/4175' MSL. Poles starting 600' from DER, 254' right of centerline, up to 48' AGL/4173' MSL. **Rwy 27,** fence starting 18' from DER, 440' left of centerline, up to 9' AGL/3969' MSL.

JOHN DAY, OR

GRANT COUNTY RGNL/OGILVIE FIELD (GCD)
AMDT 1 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** NA, Terrain.

DEPARTURE PROCEDURE: **Rwy 27,** climbing left turn to 12000 heading 270° and IMB R-100 to IMB VORTAC, climb in IMB VORTAC holding pattern (E, right turns, 280° inbound) to cross IMB VORTAC at or above MEA for route of flight.

NOTE: **Rwy 27,** fence beginning 195' from departure end of runway, 50' right of centerline, up to 16' AGL/3665' MSL. Trees beginning 229' from departure end of runway, 261' right of centerline, up to 26' AGL/3662' MSL. Bush 389' from departure end of runway, 438' right of centerline, 20' AGL/3659' MSL.

KALISPELL, MT

GLACIER PARK INTL

DEPARTURE PROCEDURE: Use SKOTT DEPARTURE.

KELSO, WA

SOUTHWEST WASHINGTON RGNL (KLS)
AMDT 3 10098 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** NA, terrain. **Rwy 30,** std. with a min. climb of 370' per NM to 1900 or 1900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE:. **Rwy 30**, climb heading 303° to 1900 then climbing right turn to 3900 direct LSO NDB. Continue climb in LSO NDB holding pattern (North, right turns, 175° inbound) to cross LSO NDB at or above 3900, then via BTG R-310 to BTG VORTAC. For climb in visual conditions: cross Southwest Washington Rgnl at or above 1800, then via BTG R-309 to BTG VORTAC.

NOTE: **Rwy 30,** light pole 22' from DER, 301' right of centerline, 30' AGL/49' MSL. Windsock 235' from DER, 348' left of centerline, 30' AGL/49' MSL. Rotating beacon 502' from DER, 425' left of centerline, 50' AGL/70' MSL. Multiple trees beginning 213' from DER, 530' right to 747' left of centerline, up to 136' AGL/155' MSL. Pole 964' from DER, 44' right of centerline, 30' AGL/50' MSL.

KEMMERER, WY

KEMMERER MUNI (EMM)
AMDT 1 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4,10,22,28,** NA - Rwy surfaces.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 12000 via heading 166° and FBR VOR/DME R-330 to FBR VOR/DME before proceeding on course. **Rwy 34,** climb via heading 346° to 8200 then climbing right turn to12000 via heading 125° and FBR VOR/DME R-345 to FBR VOR/DME before proceeding on course.

KLAMATH FALLS, OR

KLAMATH FALLS

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 14**, 1100-3 or std. with a min. climb of 275' per NM to 5500. **Rwy 25**, 3300-3 or std. with a min. climb of 250' per NM to 7400. **Rwy 32**, 2000-3 or std. with a min. climb of 320' per NM to 6300.

DEPARTURE PROCEDURE: **Rwys 14,25**, climb via runway heading to 6000 then climbing right turn direct LMT VORTAC, thence... **Rwy 32**, climb via runway heading to 5500 then climbing left turn direct LMT VORTAC, thence... climb in LMT holding pattern (W, right turns, 070° inbound) to cross LMT VORTAC at or above 8000.

LA GRANDE, OR

LA GRANDE/UNION COUNTY

TAKE-OFF MINIMUMS: **Rwy 12**, Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 4500-3 or std. with a min. climb of 500' per NM to 7800. **Rwy 30,** Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 3600-3 or std. with a min. climb of 450' per NM to 6800. **Rwy 34,** 2900-3 or std. with a min. climb of 350' per NM to 6100. **Rwy 16,** 2000-3 or std. with a min. climb of 500' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 12**,**16,** climbing left turn direct LGD NDB, thence; **Rwys 30,34,** climbing right turn heading 010°, thence; **all aircraft** climb to 7000 via the 339° bearing from LGD NDB, then climbing right turn direct LGD NDB.

LAKEVIEW, OR
LAKE COUNTY
TAKE-OFF MINIMUMS: **Rwy 16,** 3700-5 or std. with a min. climb of 320' per NM to 8800. **Rwy 34,** 2500-5 or std. with a min. climb of 320' per NM to 8500.
DEPARTURE PROCEDURE: **Rwy 16**, climbing right turn via LKV R-163 to LKV VORTAC. **Rwy 34**, climbing left turn heading 320° to intercept LKV R-148 then via LKV R-148 to LKV VORTAC. **All aircraft** continue climbing in the LKV VORTAC holding pattern (NW, right turns, 148° inbound) to MEA for route of flight.

LARAMIE, WY
LARAMIE RGNL
DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwys 12,21**, turn right. **All aircraft** climb direct LAR VORTAC, continue climb in holding pattern (W, left turns, 107° inbound) to cross LAR VORTAC at or above: westbound V4, 10600. All others cross LAR VORTAC at or above MEA for direction of flight.

LAUREL, MT
LAUREL MUNI
TAKE-OFF MINIMUMS: **Rwys 9, 14, 27, 32,** NA.
DEPARTURE PROCEDURE: **Rwy 22**, turn left. **All aircraft** climb direct BIL VORTAC.

LEWISTON,ID
LEWISTON-NEZ PERCE COUNTY
DEPARTURE PROCEDURE: **Rwys 8,11,26,29**, turn left direct MQG VOR/DME. Continue climb in holding pattern (W, left turns, 066° inbound) to cross MQG VOR/DME at or above 3600.

LEWISTOWN,MT
LEWISTOWN MUNI
TAKE-OFF MINIMUMS: **Rwy 2,** 1800-2 or std. with a min. climb of 280' per NM to 6900. **Rwy 7,12,** 900-2 or std. with a min. climb of 220' per NM to 6200.
DEPARTURE PROCEDURE:**Rwys 2,30** turn left. **Rwys 7,12,20**, turn right. **Rwy 25**, climb runway heading. **All aircraft** climb direct LWT VORTAC. Continue climb in holding pattern (W, right turns, 094° inbound) to MEA for route of flight.

LEXINGTON, OR
LEXINGTON
TAKE-OFF MINIMUMS: **Rwy 26,** std. with min. climb of 280' per NM to 7600, or 1600-2 ½ for climb in visual conditions. **Rwy 8,** std. with min. climb of 490' per NM to 4200, or 1600-2 ½ for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwys 8, 26,** for climb in visual conditions: cross Lexington Airport at or above 3600.
NOTES: **Rwy 8,** trees 1.42 NM from departure end of runway, 2386' left of centerline, 100' AGL/2159' MSL. Trees 1.48 NM from departure end of runway, 2755' left of centerline, 100' AGL/2179' MSL.

LIBBY, MT
LIBBY
TAKE-OFF MINIMUMS: **Rwy 33,** not authorized. **Rwy 15,** use EYESE RNAV DEPARTURE.

LIVINGSTON, MT
MISSION FIELD (LVM)
AMDT 3 09071 (FAA)
TAKE-OFF MINIMUMS: **Rwys 8,13,26,31,** NA-Enivironmental.
DEPARTURE PROCEDURE: **Rwys 4, 22,** use LIVINGSTON DEPARTURE.

MADRAS, OR
MADRAS MUNI (S33)
ORIG-A 09043 (FAA)
TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 298' per NM to 3900 or 1100-2½ for climb in visual conditions. **Rwy 22,** std. w/ a min. climb of 281' per NM to 3900 or 1100-2½ for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing left turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course. **Rwy 16,** climbing right turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . .**Rwy 22,** climb heading 216° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . . . . .for climb in visual conditions: cross Madras Muni at or above 3400 MSL, then direct DSD VORTAC to 7000 before proceeding on course.

MC CALL, ID
MC CALL MUNI (MYL)
AMDT 2 09127 (FAA)
TAKE-OFF MINIMUMS: **Rwy 34**, NA-Obstacles.
DEPARTURE PROCEDURE: **Rwy 16**, use MCCALL DEPARTURE.

MC CHORD AFB (KTCM)
TACOMA, WA 09127
DEPARTURE PROCEDURE: **Rwy 16,** Track heading 160°, turn left to intercept SEA VORTAC R-168 (V495) to SEA 168/37.1 DME (ALDER). Cross ALDER at or above 4000. After ALDER, maintain MEA/MOCA for route of flight. **Rwy 34,** Track heading 340°, then turn right to intercept SEA VORTAC R-168 (V495) to SEA R-168/37.1 DME (ALDER). Cross ALDER at or above 4000. Maintain MEA/MOCA for route of flight.
TAKEOFF OBSTACLES: **Rwy 16,** Grove of trees 143' AGL/454' MSL, 4892' from DER, 1353' left of centerline. Grove of trees 102' AGL/419' MSL, 2395' from DER, 1028' right of centerline. Trees 136' AGL/447' MSL, 2867' from DER, 1261' left of centerline. Trees 120' AGL/430' MSL, 2594' from DER, 1113' left of centerline. Trees 85' AGL/394' MSL, 2310' from DER, 957' left of centerline. Trees 83' AGL/392' MSL, 2006' from DER, 959' left of centerline. Trees 87' AGL/389' MSL, 1758' from DER, 971' left of centerline. **Rwy 34,** Tree 106' AGL/348' MSL, 2307' from DER, 1038' left of centerline. Tree 121' AGL/370' MSL, 3190' from DER, 526' right of centerline.Aircraft 65' AGL/317' MSL, 186' from DER, 407' left of centerline. Tree 64' AGL/343' MSL, 2260' from DER, 1036' left of centerline. Building 40' AGL/321' MSL, 1668' from DER, 810' left of centerline.

MC MINNVILLE, OR

MC MINNVILLE MUNI (MMV)
AMDT 4 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 400-1¼ or std. w/ min. climb of 238' per NM to 400, or alternatively, with standard take-off minimums and normal 200'/NM climb gradient, take-off must occur no later than 2000' prior to departure end of runway. **Rwy 17,** std. w/ min. climb of 300' per NM to 1200 or 1800-2½ for climb in visual conditions. **Rwy 22,** std. w/ min. climb of 303' per NM to 1400 or 1800-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 038° to intercept UBG R-170 to UBG VOR/DME, thence ...

Rwy 17,22, climbing left turn to intercept UBG R-183 to UBG VOR/DME, thence ... or for climb in visual conditions: cross Mc Minnville Muni at or above 1800 before proceeding on course. **Rwy 35,** climb heading 347° to intercept UBG R-221 to UBG VOR/DME, thence...

... continue climb in UBG VOR/DME holding pattern (S, left turns, 003° inbound) until reaching MEA for route of flight.

NOTE: **Rwy 4,** multiple trees beginning 2040' from departure end of runway, 353' left and 209' right of centerline, up to 100' AGL/339 feet MSL. **Rwy 17,** tree 1719' from departure end of runway, 456' right of centerline, 100' AGL/231' MSL. Tree 1760' from departure end of runway, 627' left of centerline, 100' AGL/257' MSL. **Rwy 22,** multiple trees beginning 282' from departure end of runway, 120' left and 144' right of centerline, up to 100' AGL/246' MSL. Tree 4047' from departure end of runway, 1319' left of centerline, 100' AGL/284' MSL. **Rwy 35,** multiple trees beginning 1551' from departure end of runway, 229' right of centerline, up to 100' AGL/277'MSL.

MEDFORD,OR

ROGUE VALLEY INTL-MEDFORD (MFR)
AMDT 9 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,27,** NA-Obstacles. **Rwy 14**, std. w/ min. climb of 430' per NM to 4600, or 2900-3 for climb in visual conditions. **Rwy 32,** std. with a min. climb of 260' per NM to 6800, or 2900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14,** climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

Rwy 32, climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

...all aircraft climb in OED VORTAC holding pattern (hold NW, right turns, 153° inbound) to cross OED VORTAC at or above 6400.

MISSOULA, MT

MISSOULA INTL (MSO)
AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,25**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwys 11, 29,** use GRZLY DEPARTURE.

MOSES LAKE, WA

GRANT COUNTY INTL

NOTE: **Rwy 14R,** antenna 3902' from departure end of runway, 828' right of centerline, 98' AGL/1268' MSL. **Rwy 18,** pole 405' from departure end of runway, 334' right of centerline, 30' AGL/1209' MSL. Windsock 496' from departure end of runway, 371' left of centerline, 16' AGL/1195' MSL. **Rwy 32L,** pole 1326' from departure end of runway, 373' left of centerline, 22' AGL/1202' MSL.

MOUNTAIN HOME AFB (KMUO)

MOUNTAIN HOME, ID 07270

Rwy 12, 30, 6700-3*

* Or standard with minimum climb of 270/NM to 9100.

TAKE-OFF OBSTACLES: **Rwy 12**, Terrain 0' AGL/3028' MSL, 1224' from DER, 744' right of centerline. Terrain 0' AGL/3035' MSL, 824' from DER, 721' right of centerline. Terrain 0' AGL/3035' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3022' MSL, 49' from DER, 202' right of centerline. Terrain 0' AGL/3018' MSL, 148' from DER, 328' left of centerline. Terrain 0' AGL/3016' MSL, 300' from DER, 580' left of centerline. Road/Vehicle 15' AGL/3044' MSL, 1147' from DER, 794' right of centerline. Power pole 35' AGL/3069' MSL, 2914' from DER, 940' right of centerline. Tower 30' AGL/3032' MSL, 1067' from DER, 902' right of centerline. Tower 28' AGL/3039' MSL, 1172' from DER, 796' right of centerline. Tower 45' AGL/3054' MSL, 2152' from DER, 1478' left of centerline. **Rwy 30**, Terrain 0' AGL/2995' MSL, 40' from DER, 492' left of centerline. Terrain 0' AGL/2999' MSL, 370' from DER, 467' right of centerline. Terrain 0' AGL/3006' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3007' MSL, 570' from DER, 653' right of centerline. Road/Vehicle 35' AGL/3019' MSL, 954' from DER, 773' left of centerline.

MOUNTAIN HOME, ID

MOUNTAIN HOME MUNI

TAKE-OFF MINIMUMS: **Rwy 10,** 3500-2 or std. with a min. climb of 305' per NM to 7300. **Rwy 28,** 3500-2 or std. with a min. climb of 290' per NM to 7300.

DEPARTURE PROCEDURE: **Rwy 10,** climbing left turn direct STI NDB. **Rwy 28,** climbing right turn direct STI NDB. **All aircraft** departing STI NDB bearing 080° CW 340° climb on course. All others continue climb in hold (E, left turns, 271° inbound) to cross STI NDB at or above 7300.

NAMPA, ID

NAMPA MUNI

DEPARTURE PROCEDURE: **Rwy 11**, climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course. **Rwy 29,** climb runway heading to 3700 then climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course.

NOTE: **Rwy 11,** 70' AGL tree, 1225' from departure end of runway, 90' right of centerline.

NEWCASTLE, WY

MONDELL FIELD (ECS)
AMDT 3A 09267 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5,17,23,35,** NA. **Rwy 13,** 200-1 or std. with a min. climb of 275' per NM to 4400. **Rwy 31,** 300-1 or std. with a min. climb of 300' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 31,** climbing left turn. **All aircraft** climb to 5500 via ECS R-143, then climbing right turn direct ECS VOR, continue climb on course.

NOTE: **Rwy 13,** fence posts, beginning 299' from DER, 218' left of centerline, up to 10' AGL/ 4190' MSL. Light on antenna 1951' from DER, 879' left of centerline, 84' AGL/4244' MSL. **Rwy 31,** multiple poles, beginning 74' from DER, 237' right of centerline, up to 20' AGL/ 4200' MSL. Bush 5787' from DER, 1441' right of centerline, 13' MSL/4363' MSL. Railroad 735' from DER, 314' right of centerline 30' AGL/4202' MSL. Road 207' from DER, 254' right of centerline, 15' AGL/4187' MSL.

NEWPORT, OR

NEWPORT MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, NA. **Rwy 16**, 500-2 or std. with a min. climb of 310' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 2,** NA. **Rwy 16,** turn right. **Rwy 34**, turn left. Aircraft departing via ONP R-180 CW R-320 depart on course. All others continue climbing via ONP R-200 to 1500 then climbing left turn direct ONP VORTAC. Cross ONP VORTAC at or above 2200.

NORTH BEND, OR

SOUTHWEST OREGON RGNL (OTH)
AMDT 4B 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, 800-2 or std. with a min. climb of 340' per NM to 900. **Rwy 13,** 800-2. **Rwys 16,34,** NA-Rwy closed. **Rwy 31,** 300-2 or std. with a min. climb of 240' per NM to 400.

DEPARTURE PROCEDURE: **Rwys 4,31,** turn left. **Rwys 13, 22**, turn right. **All aircraft** climb via OTH VORTAC R-250 to 1300 then climbing right turn direct OTH VORTAC.

NOTE: **Rwy 13,** spire 3468' from departure end of runway, 1128' left of centerline, 55' AGL/243' MSL, multiple trees beginning 3068' from departure end of runway, 78' left of centerline, up to 132' AGL/291' MSL.

OAK HARBOR, WA

A J EISENBERG (OKH)
ORIG-A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** 300-1. **Rwy 25,** 300-1

DEPARTURE PROCEDURE: **Rwy 7,** climb via heading 071° to 2000, then climbing right turn direct CVV VOR/DME. Continue climb on course. **Rwy 25,** climb via heading 251° to 2100, then climbing left turn direct CVV VOR/DME. Continue climb on course.

NOTE: **Rwy 7,** multiple trees beginning 1167' from DER, 212' left of centerline, up to 80' AGL/319' MSL. Multiple trees beginning 664' from DER, 208' right of centerline, up to 80' AGL/299' MSL. Fence 612' from DER, right and left of centerline, 10' AGL/229' MSL. Multiple bushes beginning 240' from DER, 64' left of centerline, up to 8' AGL/227' MSL. **Rwy 25,** cars on road 87' from DER, left and right of centerline, up to 15' AGL/174' MSL. Multiple trees beginning 2271' from DER, right and left of centerline, up to 80' AGL/279' MSL.

OLYMPIA, WA

OLYMPIA RGNL (OLM)
AMDT 5A 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-2 or std. with a min. climb of 706' per NM to 600, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 085° to 1000 then climbing left turn direct OLM VORTAC, thence. . .**Rwy 17,** climb heading 172° to 1200 then climbing right turn direct OLM VORTAC, thence. . .or climb in visual conditions to cross OLM VORTAC at or above 2300, thence. . . **Rwy s 26,35,** climbing right turn direct OLM VORTAC, thence. . .

. . .continue climb in OLM VORTAC holding pattern (south, right turn, 356° inbound) to cross OLM VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** multiple trees beginning 880' from DER, 214' left of centerline, up to 100' AGL/343' MSL. Multiple trees beginning 1636' from DER, 131' right of centerline, up to 100' AGL/320' MSL. **Rwy 17,** multiple trees beginning 1008' from DER, 24' left of centerline, up to 100' AGL/490' MSL. Multiple trees beginning 752' from DER, 3' right of centerline, up to 100' AGL/370' MSL. **Rwy 26,** multiple trees and WSK on building beginning 475' from DER, 595' left of centerline, up to 100' AGL/330' MSL. Multiple trees beginning 338' from DER, 339' right of centerline, up to 100' AGL/309' MSL. **Rwy 35,** multiple trees beginning 2176' from DER, 198' left of centerline, up to 100' AGL/313' MSL. Multiple trees and field light on hangar beginning 657' from DER, 621' right of centerline, up to 100' AGL/315' MSL.

OMAK, WA

OMAK

TAKE-OFF MINIMUMS: **Rwy 17,** 2200-2 or std. with a min. climb of 300' per NM to 4200. **Rwy 35,** NA.

DEPARTURE PROCEDURE: **Rwy 17,** use GETNG RNAV DEPARTURE. **Rwy 35,** NA.

ONTARIO, OR

ONTARIO MUNI (ONO)
AMDT 3 08325 (FAA)

DEPARTURE PROCEDURE: **Rwy 32**, climb to 9600 on a heading between 010° CW to 141° from departure end of runway or minimum climb of 280' per NM to 9600 for all other courses.

NOTE: **Rwy 14,** multiple trees, poles, and buildings beginning 90' from departure end of runway, 157' right of centerline up to 120' AGL/2314' MSL. Multiple trees, poles, and buildings beginning 502' from departure end of runway, 506' left of centerline up to 120' AGL/2314' MSL. **Rwy 32,** multiple trees, poles, and buildings beginning 340' from departure end of runway, 405' left of centerline up to 100' AGL/2458' MSL. Multiple trees, poles, and buildings beginning 2' from departure end of runway, 472' right of centerline up to 100' AGL/2431' MSL.

PASCO, WA

TRI-CITIES

DEPARTURE PROCEDURE: **All runways**, climb runway heading to 1000, thence... **Rwy 12**, turn left. All others turn right. **All aircraft** climb direct PSC VOR/DME before proceeding on course.

PENDLETON, OR

EASTERN OREGON RGNL AT PENDLETON (PDT)

AMDT 3 09183 (FAA)

DEPARTURE PROCEDURE: **Rwys 7, 29, 34,** climbing left turn direct PDT VORTAC, thence...

Rwys 11, 16, climbing right turn direct PDT VORTAC, thence...

Rwy 25, climb direct PDT VORTAC, thence...

...continue climb in PDT VORTAC holding pattern (West, left turn, 073° inbound) to cross PDT VORTAC at or above MEA before proceeding on course.

NOTE: **Rwy 16,** multiple trees beginning 232' from DER, 348' right of centerline, up to 100' AGL/1579' MSL. **Rwy 25,** multiple antennas and terrain beginning 203' from DER, 259' left of centerline, up to 13' AGL/1512' MSL. **Rwy 29,** terrain 189' from DER, 247' left of centerline, 1493' MSL.

PINEDALE, WY

PINEDALE/RALPH WENZ FIELD (PNA)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 310' per NM to 8300, or 4900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 11,** climbing right turn to 10000 via heading 190° and BPI R-040 to BPI VOR/DME before proceeding on course. **Rwy 29,** climbing left turn to 10000 via heading 230° and BPI R-020 to BPI VOR/DME before proceeding on course or for climb in visual conditions: cross Pinedale/Ralph Wenz Field at or above 11800 before proceeding on course.

PLENTYWOOD, MT

SHER-WOOD

NOTE: **Rwy 12,** multiple bushes beginning 47' from departure end of runway, 71' left of centerline, up to 12' AGL/2251' MSL. Multiple bushes beginning 362' from departure end of runway, 514' right of centerline, up to 12' AGL/ 2251' MSL. **Rwy 30,** multiple bushes and road beginning 68' from departure end of runway, 75' right of centerline, up to 12' AGL/2303' MSL. Multiple bushes beginning 217' from departure end of runway, 60' left of centerline, up to 12' AGL/2296' MSL.

POCATELLO, ID

POCATELLO RGNL (PIH)

AMDT 7 09351 (FAA)

DEPARTURE PROCEDURE: use KNURL ONE DEPARTURE.

POLSON, MT

POLSON

TAKE-OFF MINIMUMS: **Rwy 18**, N/A-extremely precipitous terrain. **Rwy 36**, standard with a min. climb of 270' per NM to 8400'.

DEPARTURE PROCEDURE: **Rwy 36**, Use ANGIL RNAV DEPARTURE.

NOTES: **Rwy 36**, Road 509' from departure end of runway, 2955' MSL. Trees 2.39 NM from departure end of runway, 3383' left of centerline, 100' AGL/3179 MSL. Rapidly rising precipitous terrain left and right of centerline running along southern Flathead River ridges.

PORT ANGELES, WA

PORT ANGELES CGAS

DEPARTURE PROCEDURE: Copter departure, climb from landing area direct to EDIZ HOOK NDB. Continue climb in holding pattern (NE, right turns, 237° inbound) to MEA for direction of flight.

WILLIAM R FAIRCHILD INTL

DEPARTURE PROCEDURE: **Rwys 8,13, 26, 31**, use WATTR FIVE DEPARTURE.

PORTLAND, OR

PORTLAND INTL (PDX)

AMDT 6 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** 500-3 or std. w/ min. climb of 400' per NM to 600. **Rwy 10L/R,** std. w/ min. climb of 270' per NM to 2900. **Rwy 21,** std. w/ min. of 310' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 025° to 700, then climbing left turn direct BTG VORTAC, thence ... **Rwys 10L,10R,** climb heading 099° to 500, then climbing left turn direct BTG VORTAC, thence ...**Rwy 21,** climb heading 205.03 to 500, then climbing right turn direct BTG VORTAC, thence ...

Rwys 28L,28R, climb heading 279° to 500, then climbing right turn direct BTG VORTAC, thence ...

... continue climb in BTG VORTAC holding pattern (hold NW, right turns, 149° inbound) to cross BTG VORTAC at or above MCA/MEA before proceeding on course.

NOTE: **Rwy 3,** signs, tower, trees, and vehicle on road beginning 468' from departure end of runway, 28' left of centerline, up to 100' AGL/449' MSL. Poles, trees, and vehicle on road beginning 609' from departure end of runway, 7' left of centerline, up to 100' AGL/416' MSL. **Rwy 10L,** rising terrain and vehicle on road beginning 7' from departure end of runway, 376' left of centerline, up to 17' AGL/60' MSL. **Rwy 10R,** pole 1996' from departure end of runway, 758' right of centerline, 54' AGL/74' MSL. note: **Rwy 21,** trees beginning 1319' from departure end of runway,155' right of centerline, up to 100' AGL/318' MSL. Poles and trees beginning 353' from departure end of runway, 36' left of centerline, up to 100' AGL/317' MSL. **Rwy 28L,** trees 1873' from departure end of runway, 836' left of centerline, 50' AGL/ 88' MSL.

Rwy 28R, multiple signs, poles, and vehicle on road beginning 876' from departure end of runway, 654' right of centerline, up to 27' AGL/69' MSL.

PORTLAND, OR (CON'T)

PORTLAND-HILLSBORO

TAKE-OFF MINIMUMS: **Rwy 30,** 200-1¼ or std. with a min. climb of 223' per NM to 500. Alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1600' prior to departure end of runway.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn direct UBG VOR/DME...**Rwys 2, 20, 30,** climbing left turn direct UBG VOR/DME...

...all aircraft climb in UBG VOR/DME holding pattern (west, right turn, 108° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

NOTE: **Rwy 2,** multiple roads beginning 246' from departure end of runway, 3' right of centerline, up to 15' AGL/220' MSL. **Rwy 12,** multiple trees beginning 1842' from departure end of runway, 222' left of centerline, up to 125' AGL/324' MSL. Multiple trees beginning 3629' from departure end of runway, 46' right of centerline, up to 143' AGL/332' MSL. **Rwy 20,** multiple trees and pole beginning 967' from departure end of runway, 118' left of centerline, up to 93' AGL/292' MSL. Vent of hangar 63' from departure end of runway, 428' left of centerline, 26' AGL/225' MSL. Multiple trees and antenna on building beginning 965' from departure end of runway, 449' right of centerline, up to 74' AGL/273' MSL. **Rwy 30,** multiple trees beginning 1664' from departure end of runway, 623' right of centerline, up to 194' AGL/363' MSL. Pole 702' from departure end of runway, 603' left of centerline, 26' AGL/215' MSL.

PORTLAND-TROUTDALE

TAKE-OFF MINIMUMS: **Rwy 7,** 3600-2 or std. with a min. climb of 380' per NM to 4100. **Rwy 25**, 900-2 or std. with a min. climb of 360' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 7**, turn left. **Rwy 25**, turn right. **All aircraft** climb via BTG R-125 direct BTG VORTAC. Continue climb on BTG R-329 within 10 NM to cross BTG VORTAC at or above: BTG R-355 CW R-055 or R-085 CW R-115 5000; all others 2500.

POWELL, WY

POWELL MUNI

TAKE-OFF MINIMUMS: **Rwy 3,16,21,34**, NA.

DEPARTURE PROCEDURE: **Rwy 13**, turn right. **Rwy 31**, turn left. **All aircraft** climb direct COD VOR/DME. Aircraft departing COD R-350 CW R-170 climb on course. All others continue climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above 8800

PRINEVILLE, OR

PRINEVILLE (S39)
AMDT 1 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10,** std. w/ min. climb of 350 feet per NM to 6500, or 2400-3 for climb in visual conditions. **Rwy 15,** std. w/ min. climb of 470' per NM to 6200, or 2400-3 for climb in visual conditions. **Rwy 28,** std. w/ min. climb of 450' per NM to 6700, or 2400-3 for climb in visual conditions. **Rwy 33,** std. w/ min. climb of 380' per NM to 6700, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 10**, climb heading 102° to 6500 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 15,** climb heading 154° to 6200 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 28,** climb heading 282° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 33,** climb heading 334° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course.

NOTE: **Rwy 10,** trees beginning 2693' from departure end of runway, 545' right of centerline, up to 100' AGL/3339' MSL. **Rwy 15,** trees beginning 1129' from departure end of runway, 697' right of centerline, up to 100' AGL/3319' MSL**. Rwy 28,** trees beginning 1803' from departure end of runway, 74' right of centerline, up to 100' AGL/3319' MSL. **Rwy 33,** trees beginning 2636' from departure end of runway, 379' right of centerline, up to 100' AGL/ 3319' MSL.

PULLMAN-MOSCOW, WA

PULLMAN-MOSCOW RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 300-1¼ with a min. climb of 278' per NM to 4400, or 4600-3 for climb in visual conditions. **Rwy 23**, 300-1 or std. with a min. climb of 361' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn direct PUW VOR/DME, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight, or for climb in visual conditions; cross Pullman-Moscow Rgnl at or above 4500. **Rwy 23,** climbing left turn via PUW VOR/DME R-021, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight.

NOTE: **Rwy 5,** multiple trees and terrain left and right of centerline, beginning 614' from departure end of runway, 424' right of centerline up to 50' AGL/2677' MSL. Terrain 3503' from departure end of runway, 770' left of centerline, 50' AGL/2608' MSL. **Rwy 23,** multiple trees, terrain, fences, poles, and tanks beginning 669' from departure end of runway, 412' right of centerline, up to 52' AGL/2769' MSL.

PUYALLUP, WA

PIERCE COUNTY-THUN FIELD (PLU)
AMDT 1A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16, 34,** 300-1.

DEPARTURE PROCEDURE: **Rwy 16,** climbing right turn. **Rwy 34,** climb runway heading. **All aircraft** climb via SEA R-158 to COTNY INT/SEA 18.1 DME. Continue in COTNY holding pattern (Hold S, left turns, 338° inbound) to depart COTNY at or above: 001° CW 090° 3500, 090° 3500, 091° CW 120° 10,400, 121° CW 170° 2700, 171° CW 360° 1500.

NOTE: **Rwy 16,** light pole 511' from DER, 567' right of centerline, 40' AGL/552' MSL. Multiple poles on building beginning 187' from DER, 416' left of centerline, up to 575' MSL. Multiple trees beginning 363' from DER, 656' left of centerline to 540' right of centerline, up to 662' MSL. Vehicles on road beginning 1149' from DER, 512' right of centerline, up to 15' AGL/582' MSL. Terrain beginning 1293' from DER, 529' left of centerline to 352' right of centerline, up to 581' MSL. Pipe 1520' from DER, 303' left of centerline, 574' MSL. **Rwy 34,** multiple trees beginning 58' from DER, 591' left of centerline to 1029' right of centerline, up to 694' MSL. Flagpole 1155' from DER, 464' left of centerline, 578' MSL. Building 564' from DER, 410' left of centerline, 555' MSL.

RAWLINS, WY

RAWLINS MUNI/HARVEY FIELD

TAKE-OFF MINIMUMS: **Rwy 4**, 600-2 or std. with a min. climb of 440' per NM to 7500. **Rwy 22**, 1500-2 or std. with a min climb of 365' per NM to 8700. **Rwys 10, 28**, NA.

DEPARTURE PROCEDURE: **Rwy 4,** turn right. **Rwy 22**, turn left. Climb to 10000 via RWL R-200 and CKW R-080 to CKW VOR/DME then via assigned route. Aircraft departing eastbound V4 or V6 climb via RWL R-200 to assigned route then climb on course.

REDMOND, OR

ROBERTS FIELD (RDM)
AMDT 5 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22,** std. w/ min. climb of 269' per NM to 4700. **Rwy 28,** std. w/ min. climb of 276' per NM to 4800.

DEPARTURE PROCEDURE: **Rwy 4,** climbing left turn via heading 265° and DSD R-047 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 10,** climbing right turn via heading 240° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 22,** climb heading 222° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 28,** climbing left turn via heading 275° and DSD R-045 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 28,** numerous trees beginning 1' from DER, 356' right of centerline, 12' AGL/3079' MSL. Tree 364' from DER, 448' left of centerline, 15' AGL/3054' MSL.

RENTON, WA

RENTON MUNI (RNT)
AMDT 7 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 405' per NM to 800, or 1100-2½ for climb in visual conditions. **Rwy 34**, 500-2¾ or std. with a min. climb of 315' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 157° to 700, then climbing right turn direct SEA VORTAC, thence..., or for climb in visual conditions: cross Renton Muni Airport westbound at or above 1000 MSL, then proceed on SEA R-029 to SEA VORTAC, thence... **Rwy 34,** Climb heading 337° to 700, then climbing left turn direct SEA VORTAC thence ...
...Climb in SEA VORTAC holding pattern (East, left turns, 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight.

NOTES: **Rwy 16,** trees, towers, lights and blast shield beginning 185' from DER, 4' left of centerline, up to 100' AGL/574' MSL. Trees, lights and sign beginning 40' from DER, 54' right of centerline, up to 100' AGL/297' MSL. **Rwy 34,** Trees and terrain beginning 1.6 NM from DER, 104' left of centerline, up to 100' AGL/485' MSL. Trees, terrain and wood piling beginning 75' from DER, 7' right of centerline, up to 100' AGL/426' MSL.

REXBURG, ID

REXBURG-MADISON COUNTY

DEPARTURE PROCEDURE: **Rwy 17**, climbing right turn. **Rwy 35,** climbing left turn. **All aircraft** climb via IDA VOR/DME R-015 to RIGBY Int to MEA for route of flight before proceeding on course.

NOTE: **Rwy 17,** 100' AGL trees 125' from departure end of runway, 350' left of centerline. **Rwy 35,** 100' AGL trees 350' from departure end of runway, 450' right of centerline. 100' AGL trees 750' from departure end of runway, 500' left of centerline.

RICHLAND, WA

RICHLAND

TAKE-OFF MINIMUMS: **Rwy 1,** 200-1 or std. w/ min. climb of 310' per NM to 700. **Rwy 19,** std. w/ min. climb of 480' per NM to 2300, or 1800-2½ for climb in visual conditions. **Rwy 26,** 500-2½ or std. w/ min. climb of 309' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn via heading 070° and PSC R-301 to PSC VOR/DME, thence...**Rwy 8,** climbing right turn direct PSC VOR/DME, thence...**Rwy 19,** climbing right turn via heading 040° and PSC R-269 to PSC VOR/DME, or for climb in visual conditions: cross Richland Airport at or above 2000 then proceed on PSC R-269, to PSC VOR/DME thence...**Rwy 26,** climbing right turn via heading 070° and PSC R-287 to PSC VOR/DME, thence...

...climb in PSC VOR/DME holding pattern (hold East, right turn, 291° inbound) to cross PSC VOR/DME at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 1,** crane and multiple poles 752' from departure end of runway, 477' right of centerline, up to 110' AGL/520' MSL. Trees 43' from departure end of runway, 414' left of centerline, 100' AGL/407' MSL. **Rwy 8,** multiple trees and railroad beginning 400' from departure end of runway, 252' right of centerline, up to 100' AGL/469' MSL. Multiple trees and railroad beginning 204' from departure end of runway, 241' left of centerline, up to 100' AGL/469' MSL. **Rwy 19,** multiple trees 64' from departure end of runway, 169' right of centerline, up to 100' AGL/679' MSL. Multiple trees, terrain, and buildings 22' from departure end of runway, 30' left of centerline, up to 100' AGL/479' MSL. **Rwy 26,** multiple trees, fence, and terrain beginning 458' from departure end of runway, 230' left of centerline, up to 100' AGL/839' MSL. Multiple posts, antenna, and terrain beginning 164' from departure end of runway, 255' right of centerline, up to 18' AGL/417' MSL.

RIVERTON, WY

RIVERTON RGNL (RIW)

AMDT 1 10042 (FAA)

DEPARTURE PROCEDURE: **Rwys 1, 10, 19, 28,** climbing right turn direct RIW VOR/DME. **All Aircraft** climb in RIW holding pattern (hold East, right turns, 287° inbound) to MEA for direction of flight.

NOTES: **Rwy 1,** sage brush beginning 35' from DER, left and right of centerline, up to 3' AGL/5499' MSL. **Rwy 10 ,** sage brush beginning 20' from DER, left and right of centerline, up to 3' AGL/5466' MSL. **Rwy 19,** sage brush beginning 49' from DER, 171' right of centerline, up to 3' AGL/5479' MSL. Windstocks beginning 154' from DER, 268' right of centerline, up to 28' AGL/5468' MSL. **Rwy 28,** sage brush, tower, and pole beginning 54' from DER, 154' right of centerline, up to 59' AGL/5679' MSL. Sage brush, fence, and poles beginning 132' from DER, 27' left of centerline, up to 67' AGL/5647' MSL.

ROCK SPRINGS, WY

ROCK SPRINGS-SWEETWATER COUNTY (RKS)

AMDT 6 10098 (FAA)

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 8000 then climbing left turn direct OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold East, right turns, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight. **Rwy 9,** climb heading 090° to 8200 then climbing left turn direct OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold East, right turns, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight. **Rwy 21,** climb heading 212° to 8400, then climbing right turn direct OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold East, right turns, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight. **Rwy 27,** climb heading 270° to 7900, then climibing right turn via OCS R-291 to OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold East, right turns, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight.

NOTE: **Rwy 3,** vehicle on road beginning 22' from DER, 120' left of centerline, up to 20' AGL/6760' MSL, bushes beginning 178' from DER, 517' right of centerline, up to 15' AGL/6755' MSL. **Rwy 21,** bush 53' from DER, 221' left of centerline, 15' AGL/6737' MSL.

RONAN, MT

RONAN (7S0)

ORIG 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 260' per NM to 9900 or 6100-3 for climb in visual conditions. **Rwy 34,** std. w/ min. climb of 250' per NM to 9900 or 6100-3 in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 8800 on a heading between 177° CW to 336° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course. **Rwy 34,** climb to 8800 on a heading between 336° CCW to 177° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course.

NOTE: **Rwy 16,** tree 485' from DER, 386' left of centerline 50' AGL/3149' MSL. **Rwy 34,** building 158' from DER, 370' left of centerline 40' AGL/3130' MSL. Tree 1358' from DER, 556' left of centerline 50' AGL/3149' MSL.

ROSEBURG, OR

ROSEBURG RGNL (RBG)
AMDT 5A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 642' per NM to 2000, or 1700-3 for climb in visual conditions. **Rwy 34,** std. with a min. climb of 760' per NM to 2000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb direct RBG VOR/DME, or climb in visual conditions to cross Roseburg Airport southbound at or above 2200, then direct RBG VOR/DME. Then via RBG R-157 and right turn direct RBG VOR/DME to cross at or above the MCA or MEA for route of flight. **Rwy 34,** climb via heading 342° to 4000, or climb in visual conditions to cross Roseburg Airport northbound at or above 2200 and then via heading 342° to 4000. Then climbing left turn direct RBG VOR/DME, to cross RBG VOR/DME at or above MCA or MEA for route of flight. Aircraft that have not reached the MCA or MEA for route of flight continue climb via RBG R-157 and right turn direct RBG VOR/DME.

NOTE: **Rwy 16,** tower 1.56 NM from departure end of runway, 2231' right of centerline, 50' AGL/1201' MSL, tree 1.47 NM from departure end of runway, 1560' right of centerline, 21' AGL/980' MSL, tree 1.46 NM from departure end of runway, 1298' right of runway centerline, 45' AGL/964' MSL, pole 1.36 NM from departure end of runway, 921' right of centerline, 75' AGL/914' MSL, rod on airway beacon 1.29 NM from departure end of runway, 409' right of centerline, 52' AGL/891' MSL, tree 655' from departure end of runway, 347' right of runway centerline, 93' AGL/593' MSL, obstruction light on pole 691' from departure end of runway, 187' right of runway centerline, 117' AGL/557' MSL. **Rwy 34,** tree 1.10 NM from departure end of runway, 2003' left of runway centerline, 60' AGL/1179' MSL. Tree 5165' from departure end of runway, 1744' left of centerline, 64' AGL/1023' MSL. Obstruction light on pole 4850' from departure end of runway, 56' left of centerline, 15' AGL/894' MSL. Tree 4785' from depature end of runway, 48' left of runway centerline, 23' AGL/862' MSL. Tree 1.41 NM from departure end of runway, 1826' left of runway centerline, 17' AGL/896' MSL. Tree 4079' from departure end of runway, 508' left of runway centerline, 21' AGL/780' MSL. Tree 5067' from departure end of runway, 265' right of centerline, 43' AGL/802' MSL. Tree 4260' from departure end of runway, 345' right of centerline, 42' AGL/761' MSL. Tree 1465' from departure end of runway 329' right of runway centerline, 100' AGL/642' MSL. Tree 913' from departure end of runway, 217' right of runway centerline, 100' AGL/622' MSL. Tree 647' from departure end of runway, 345' right of runway centerline, 100' AGL/615' MSL. Hill 1065' from departure end of runway, 299' right of runway centerline 608' MSL. Trees beginning 60' from departure end of runway, 117' left of runway centerline, up to 16' AGL/554' MSL. Trees beginning 242' from departure end of runway, 209' right of runway centerline, up to 56' AGL/584' MSL. Vehicle on road 265' from departure end of runway, 229' right of runway centerline, 15' AGL/560' MSL. Multiple signs beginning 792' from departure end of runway, 550' left of runway centerline, up to 60' AGL/565' MSL. Bush 94' from departure end of runway, 228' right of runway centerline, 19' AGL/547' MSL. Bush 202' from departure end of runway, 92' left of centerline, 7' AGL/535' MSL. Pole 640' from departure end of runway, 354' left of runway centerline, 29' AGL/557' MSL.

SALEM, OR

MCNARY FIELD

TAKE-OFF MINIMUMS: **Rwy 13**, 600-2 or std. with a min. climb of 240' per NM to 800. **Rwy 16**, 600-2 or std. with a min. climb of 340' per NM to 800.

DEPARTURE PROCEDURE: Comply with SIDs or; **Rwys 31, 34**, turn right. **Rwy 16**, turn left. **Rwy 13**, climb heading 130°. **All aircraft** climb direct TURNO LOM/Int. Continue climb in holding (SE, left turns, 310° inbound) to cross TURNO LOM/INT at or above MEA for route of flight.

SALMON, ID

LEMHI COUNTY

TAKE-OFF MINIMUMS: **Rwy 17,** NA. **Rwy 35,** 4300-5 or std. with a min. climb of 390' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 17,** NA. **Rwy 35,** climb runway heading to 8000, then climbing left turn to 11,300 direct LKT VOR/DME before proceeding on course.

SANDPOINT, ID

SANDPOINT

TAKE-OFF MINIMUMS: **Rwy 1,** 4200-2 or std. with a min. climb of 520' per NM to 5800. **Rwy 19,** 2200-2 or std. with a min. climb of 480' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn to COE VOR/DME via heading 200° and COE R-002. **Rwy 19,** climbing left turn to COE VOR/DME via heading 140° and COE R-002.

SARATOGA, WY

SHIVELY FIELD

TAKE-OFF MINIMUMS: **Rwy 23,** 400-1 or std. with a min. climb of 220' per NM to 7400.

DEPARTURE PROCEDURE: **Rwy 5,** turn left heading 280°. **Rwy 23,** turn right heading 340°. **All aircraft** climb to 9000 via 310° bearing from SAA NDB then continue climb on course.

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK

DEPARTURE PROCEDURE: **Rwy 15**, climbing left turn direct BTG VORTAC. **Rwy 33,** climbing right turn direct BTG VORTAC. Aircraft departing BTG R-160 CW R-329 climbing left turn on course. All others climb in BTG VORTAC holding pattern (NW, right turns, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for direction of flight.

NOTE: **Rwy 15,** 158' MSL tree 470' from departure end of runway, 499' right of centerline. **Rwy 33,** cross departure end of runway 33 at or above 35' AGL/90' MSL. 130' MSL tree 613' from departure end of runway, 414' right of centerline; 142' MSL trees 1343' from departure end of runway, 348' right of centerline.

SCOBEY, MT

SCOBEY

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 280' per NM to 3400.

SEATTLE, WA

BOEING FIELD/KING COUNTY INTL

TAKE-OFF MINIMUMS: **Rwy 13L,** 500-3 w/ min. climb of 232' per NM to 800, or 1000-2½ for climb in visual conditions. **Rwy 13R,** std. w/ a min. climb of 476' per NM to 900, or 500-3 w/ a min. climb of 386' per NM to 900, or 1000-2½ for climb in visual conditions. **Rwy 31L,** std. w/ a min. climb of 386' per NM to 800, or 300-1½ w/ min. climb of 235' per NM to 800, or 1000-2 ½ for climb in visual conditions. **Rwy 31R,** std. w/ a min. climb of 334' per NM to 900, or 400-1¾ w/ min. climb of 216' per NM to 900, or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13L/R,** climbing right turn. **Rwys 31L/R,** climbing left turn. All aircraft climb direct to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000. For climb in visual conditions cross Boeing Field/King County Intl Airport at or above 900, then climb to 3000 via SEA R-344 to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000.

NOTES: **Rwy 13L,** multiple trees, towers, antennas and building beginning 402' from departure end of runway, 411' left of centerline, up to 127' AGL/479' MSL. **Rwy13R,** multiple trees and poles beginning 35' from departure end of runway, 154' left of centerline, up to 66' AGL/485' MSL. Multiple trees and poles beginning 501' from departure end of runway, 3' right of centerline, up to 77' AGL/195' MSL. **Rwy 31L,** multiple trees, fence, and building beginning 250' from departure end of runway, 253' left of centerline, up to 71' AGL/101' MSL. Multiple trees and floodlights beginning 1245' from departure end of runway, 447' right of centerline, up to 71' AGL/239' MSL. **Rwy31R,** multiple trees, hangers, towers, poles and building beginning 12' from departure end of runway, 389' right of centerline, up to 103' AGL/350' MSL. Multiple obstruction lights beginning 214' from departure end of runway, 99' left of centerline, up to 71' AGL/101' MSL.

SEATTLE-TACOMA INTL (SEA)

AMDT 4 08325 (FAA)

DEPARTURE PROCEDURE: **Rwys 16L, 16C, 16R,** climb to 1000 via heading 163°, then climbing right turn direct SEA VORTAC, thence...
Rwys 34L, 34C, 34R, climb to 1000 via heading 343°, then climbing left turn direct SEA VORTAC, thence...
...climb in SEA VORTAC holding pattern (hold SE, left turns, 310° inbound) to MEA/MCA for route of flight.

NOTE: **Rwy 16L,** trees beginning 2908' from departure end of runway, 1064' right of centerline, up to 100' AGL/476' MSL. **Rwy 16C,** trees beginning 4477' from departure end of runway, 484' right of centerline, up to 100' AGL/507' MSL. **Rwy 16R,** trees, antenna on building and light pole beginning 488' from departure end of runway, 436' left of centelrine, up to 100' AGL/507' MSL. Trees beginning 1137' from departure end of runway, 587' right of centerline, up to 100' AGL/468' MSL. **Rwy 34L,** fence 189' from departure end of runway, 401' right of centerline, up to 12' AGL/420' MSL. Trees beginning 4010' from departure end of runway, 857' left of centerline, up to 100' AGL/522' MSL.

SHELBY, MT

SHELBY

TAKE-OFF MINIMUMS: **Rwy 5,** 200-1¼ or std. w/ min. climb of 212' per NM to 3700, or alternatively, w/ std. takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1300' prior to departure end of runway.

NOTE: **Rwy 5,** fence post 320' from departure end of runway, 162' right of centerline, 12' AGL/3455' MSL, truck on road beginning 515' from departure end of runway, 632' right of centerline, 17' AGL/3498' MSL, tree 1 NM from departure end of runway, 1242' left of centerline, 75' AGL/3604' MSL. **Rwy 11,** truck on road 906' from departure end of runway, 691' left of centerline, 17' AGL/3456' MSL, tree 1697' from departure end of runway, 26' right of centerline, 75' AGL/3495' MSL, tree 1561' from departure end of runway, 322' left of centerline, 75' AGL/3514' MSL, light standard 852' from departure end of runway, 174' left of centerline, 22' AGL/3451' MSL.

SHELTON, WA

SANDERSON FIELD

TAKE-OFF MINIMUMS: **Rwy 5,** std. w/ a min. climb of 312' per NM to 4000, or 1500-2½ for a climb in visual conditions. **Rwy 23**, std. w/ a min. climb of 414' per NM to 4000, or 1500-2½ for a climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000. **Rwy 23,** climbing left turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000.

NOTE: **Rwy 5,** multiple trees beginning 550' from departure end of runway, 107' left of centerline, up to 94' AGL/366' MSL. Multiple trees beginning 130' from departure end of runway, 70' right of centerline, up to 80' AGL/352' MSL. **Rwy 23,** multiple trees beginning 52' from departure end of runway, 149' left of centerline, up to 72' AGL/330' MSL. Multiple trees beginning 886' from departure end of runway, 153' right of centerline, up to 155' AGL/486' MSL.

SHERIDAN, WY

SHERIDAN COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 700-3 or std. w/ min. climb of 318' per NM to 5100, or. . . **Rwy 14,** 800-3 or std. w/ min. climb of 263' per NM to 5100, or. . . **Rwy 23,** 900-3 or std. w/ min. climb of 348' per NM to 5100, or. . .

. . .1400/3 for climb in visual conditions. Climb in visual conditions NA at night.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn via SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 14,** climbing left turn via heading 320° and SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 23,** climbing right turn via SHR R-153 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 32,** climb via heading 320° and SHR R-106 to SHR VORTAC, thence. . .

. . .climb in holding pattern (hold northwest, left turn, 133° inbound) to cross SHR VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 5,** multiple trees beginning 101' from departure end of runway, 188' left of centerline, up to 80' AGL/3991' MSL. **Rwy 23,** fence 1201' from departure end of runway, 10' left of centerline, 20' AGL/4060' MSL. Building 1949' from departure end of runway, 415' left of centerline, 17' AGL/4077' MSL. Tree 3337' from departure end of runway, 391' right of centerline, 43' AGL/4143' MSL. **Rwy 32,** antenna 53' from departure end of runway, 398' right of centerline, 20' AGL/4020' MSL.

SIDNEY, MT

SIDNEY-RICHLAND MUNI

TAKE-OFF MINIMUMS: **Rwy 28**, 400-2 or std. with a min. climb of 260' per NM to 2300.

SNOHOMISH, WA

HARVEY FIELD (S43)

ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwys 15R, 33L**, NA-obstacles. **Rwy 15L,** std. w/ min. climb of 353' per NM to 1100, or 1200-2½ for climb in visual conditions. **Rwy 33R,** std. w/ min. climb of 475' per NM to 800, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15L,** climbing right turn on 344° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ... **Rwy 33R,** climb on 329° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ...

... aircraft departing WATON LOM on bearings 150° CW 340° from WATON LOM climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM, climb in holding pattern (South, left turns, 339° inbound) to cross WATON LOM at or above 4500 before proceeding on course.

NOTE**: Rwy 15L,** tree 81' from DER, 177' right of centerline, 40' AGL/106'MSL. Trees 685' from DER, left and right of centerline, up to 48' AGL/70' MSL. **Rwy 33R,** powerline 139' from DER, 226' left of centerline, 40' AGL/ 56' MSL. Tree 298' from DER, 205' right of centerline, 104' AGL/121' MSL. Tower 5708' from DER, 1956' right of centerline, 206' AGL/300' MSL.

SPOKANE, WA

FELTS FIELD (SFF)

AMDT 5 10098 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3L,** std. w/ min. climb of 450' per NM to 3600, or 2300-3 for climb in visual conditions. **Rwy 3R,** std. w/ min. climb of 410' per NM to 3700, or 2300-3 for climb in visual conditions. **Rwy 21L,** std. w/ min. climb of 375' per NM to 3200, or 2300-3 for climb in visual conditions. **Rwy 21R,** std. w/ min climb of 375' per NM to 3200, or 2300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3L, 3R,** climb heading 035° to 3600, then climbing right turn heading 210° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport at or above 4100, then via heading 165° and GEG R-050 to GEG VORTAC. Cross GEG VORTAC at or above MCA/ MEA for route of flight. **Rwys 21L, 21R,** climb heading 215° to 3200, then climbing left turn heading 190° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport at or above 4100, then via heading 165° and GEG R -050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA/ MEA for route of flight.

NOTE: **Rwy 3L,** trees beginning 1853' from DER, 772' right of centerline, up to 100' AGL/2037' MSL. Trees beginning 3538' from DER, 529' left of centerline, up to 100' AGL/2339' MSL. Antenna, trees and transmission poles beginning 1.5 NM from DER, 16' left of centerline, up to 100' AGL/2579' MSL. Trees beginning 2.3 NM from DER, 723' right of centerline, up to 100' AGL/2499' MSL. **Rwy 3R,** hangar, NDB, and trees beginning 92' from DER, 269' right of centerline, up to 100' AGL/2040' MSL. Trees beginning 4685' from DER, 1033' left of centerline, up to 100' AGL/2339' MSL. Antenna, trees and transmission poles beginning 1.6 NM from DER, 525' left of centerline, up to 100' AGL/2559' MSL. Trees and transmission poles beginning 2.6 NM from DER, 214' right of centerline, up to 150' AGL/2570' MSL. **Rwy 21L,** elevator, pole on building and trees beginning 315' from DER, 302' left of centerline, up to 140' AGL/2080' MSL. **Rwy 21R,** poles and trees beginning 188' from DER, 13' right of centerline, up to 100' AGL/1982' MSL. Elevator, pole, hangar, and building beginning 203' from DER, 1' left of centerline, up to 140' AGL/2080' MSL. Terrain and trees beginning 3.1 NM from DER, 4904' left of centerline, up to 100' AGL/2559' MSL.

SPOKANE INTL

DEPARTURE PROCEDURE: **All aircraft** climb direct GEG VORTAC. Continue climb via R-208 within 10 miles to cross GEG VORTAC at or above: northeastbound V120-448, 5200; eastbound V2, 5200, southeast thru westbound climb on course.

STEVENSVILLE, MT

STEVENSVILLE

TAKE-OFF MINIMUMS: **Rwy 12,** do not exceed 210 knots until established on MSO R-163. **Rwy 30,** do not exceed 210 knots until established on MSO R-160.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn via heading 335 and MSO R-163 to MSO VOR/ DME climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course. **Rwy 30,** climbing right turn via heading 025° and MSO R-160 to MSO VOR/DME Climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course.

SUNRIVER, OR

SUNRIVER

TAKE-OFF MINIMUMS: **Rwy 18**, 300-1 or std. with a min. climb of 360' per NM to 4400. **Rwy 36,** 600-2 or std. with a min. climb of 240' per NM to 4900.

DEPARTURE PROCEDURE: **Rwy 18,** climb runway heading to 7000 then climbing left turn direct DSD VORTAC. **Rwy 36,** climb direct to DSD VORTAC. Then **all aircraft** climb on course.

TACOMA, WA

TACOMA NARROWS

TAKE-OFF MINIMUMS: **Rwy 35**, 400-1 or std. with a min. climb of 210' per NM to 400'.

DEPARTURE PROCEDURE: **Rwy 17,** turn right, climb via heading 230° to intercept OLM R-009 then direct OLM VORTAC. **Rwy 35,** turn left, climb via heading 270° to intercept SEA R-230 then direct CARRO INT. Continue climb in holding (SW, right turns, 047° inbound) to MEA or assigned altitude for route of flight.

THE DALLES, OR

COLUMBIA GORGE RGNL/THE DALLES MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, CAT A, B 1100-2 or std. with a min. climb of 350' per NM to 1500. CAT C, D 2600-3 or std. with a min. climb of 475' per NM to 3100. **Rwy 7**, 900-3 or std. with a min. climb of 330' per NM to 1200. **Rwy 12**, 1400-3 or std. with a min. climb of 500' per NM to 2000. **Rwy 20**, 1800-3 or std. with a min. climb of 470' per NM to 2200. **Rwy 25**, NA. **Rwy 30**, 2900-3 or std. with a min. climb of 500' per NM to 2700.

DEPARTURE PROCEDURE: **Rwys 2,7**, climbing right turn heading 120°. **Rwy 12**, climb via runway heading. **Rwys 20, 30**, climbing left turn heading 120°. **All aircraft** intercept and climb southbound via LTJ R-165 to 3500. Then climbing left turn direct LTJ VORTAC. Continue climb in LTJ holding pattern (E, right turns, 260° inbound) to cross LTJ VORTAC at or above MCA or MEA for route of flight.

TILLAMOOK, OR

TILLAMOOK

TAKE-OFF MINIMUMS: **Rwys 1, 13, 19,** NA. **Rwy 31,** 2000-3 or std. with a min. climb of 350' per NM to 4500.

DEPARTURE PROCEDURE: **Rwys 1, 13, 19,** NA. **Rwy 31,** use FETUJ RNAV DEPARTURE.

TORRINGTON, WY

TORRINGTON MUNI (TOR)
ORIG 10042 (FAA)

NOTE: **Rwy 2,** terrain 30' from DER, 277' left of centerline, 4197' MSL. **Rwy 10,** multiple trees and fence beginning 71' from DER, 143' right of centerline, up to 14' AGL/4214' MSL. Terrain 14' from DER, 502' left of centerline, 4199' MSL. **Rwy 28,** terrain 133' from DER, 386' right of centerline, 4213' MSL.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL

TAKE-OFF MINIMUMS: **Rwy 12**, NA.

DEPARTURE PROCEDURE: Aircraft departing on TWF R-240 CW R-080 climb on course. All others climb runway heading 6000 then climbing turn direct TWF VORTAC. Climb in holding pattern (NW, right turns, 113° inbound) to MCA or MEA as appropriate for direction of flight.

VANCOUVER, WA

PEARSON FIELD (VUO)
AMDT 2 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** std. w/ min. climb of 358' per NM to 600, or 500-3 w/ min. climb of 201' per NM to 600, or 900-2½ for climb in visual conditions. **Rwy 26,** 600-3 or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 079° to 500 then climbing left turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . . **Rwy 26,** climb heading 259° to 700 then climbing right turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .

. . .continue climb in BTG VORTAC holding pattern (hold northwest, right turn, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** tree 1.4 NM from departure end of runway, 1283' left of centerline, 100' AGL/395' MSL. Tree 1.7 NM from departure end of runway, 701' left of centerline, 100' AGL/401' MSL. Tree 2 NM from departure end of runway, 849' left of centerline, 100' AGL/406' MSL. Tree 2.4 NM from departure end of runway, 648' left of centerline, 100' AGL/399' MSL. **Rwy 26,** bridge 2704' from departure end of runway, 587' left of centerline, 243' AGL/245' MSL. Crane 1.5 NM from departure end of runway, 2563' right of centerline, 237' AGL/267' MSL. Transmission line tower 2.5 NM from departure end of runway, 2036' right of centerline, 516' AGL/534' MSL.

WALLA WALLA, WA

WALLA WALLA RGNL

DEPARTURE PROCEDURE: **Rwys 2,7, 20,25,34,** turn left. **Rwy 16,** turn right. **All aircraft** climb to 2500 via ALW VOR/DME R-195, then climbing right turn direct ALW VOR/DME to cross ALW VOR/DME at or above MEA or MCA for route of flight.

NOTE: **Rwy 16,** antenna 365' from departure end of runway, 97' right of centerline, 1155' MSL. Terrain 1' from departure end of runway 140' left of centerline, 1145' MSL. **Rwy 20,** light 666' from departure end of runway, 640' left of centerline, 1170' MSL. **Rwy 34,** terrain 213' from departure end of runway, 230' right of centerline, 1130' MSL.

WEISER, ID

WEISER MUNI (S87)
ORIG 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** std. w/ min. climb of 310' per NM to 3900 or 2400-3 for climb in visual conditions. **Rwy 30,** std. w/ min. climb of 360' per NM to 4000 or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb heading 121° to 3900 before proceeding on course. **Rwy 30,** climb heading 301° to 4000 before proceeding on course

...for climb in visual conditions: cross Weiser Muni airport at or above 4400 before proceeding on course.

NOTE: **Rwy 12,** tree 248' from departure end of runway, 443' right of centerline, 100' AGL/2184' MSL. **Rwy 30,** tree 1907' from departure end of runway, 769' right of centerline, 100' AGL/2174' MSL.

WENATCHEE, WA

PANGBORN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 12,** 1500-2 or std. with a min. climb of 510' per NM to 2900. **Rwys 25, 30**, CAT A,B 1600-2 or std. with a min. climb of 360' per NM to 3100. CAT C,D 5500-3 or std. with a min. climb of 570' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading. **Rwys 25, 30,** climbing left turn. **All aircraft** climb via EAT R-113 to 4000 then climbing left turn direct EAT VOR/DME. Aircraft departing EAT R-010 CW R-140 climb on course. All others continue climb in EAT VOR/DME holding pattern (E, right turns, 253° inbound) to cross EAT VOR/DME at or above: R-141 CW R-200 7400; R-201 CW R-009, 8200.

WEST YELLOWSTONE, MT

YELLOWSTONE

TAKE-OFF MINIMUMS: **Rwy 19**, 2200-2 or std. with a min. climb of 245' per NM to 8900. FAR 135 AUTH: **Rwy 1,** ½ mile.

DEPARTURE PROCEDURE: **Rwy 1**, turn right. **All aircraft** climb direct TARGY LOM. Aircraft departing TARGY LOM on bearing 190° CW 220° climb on course. All others climb south on bearing 190° within 10 NM of TARGY LOM turn left and continue climbing direct TARGY LOM to cross TARGY LOM at or above: bearing 360° CW 190° 9300, bearing 220° CW 360° 10500

WHEATLAND, WY

PHIFER AIRFIELD

DEPARTURE PROCEDURE: **Rwy 8,** climbing left turn to 9000 via heading 030° to intercept IIP VOR/DME R-140 to JEZZY Int, thence. . .**Rwy 26,** climbing right turn to 9000 via heading 360° and GYZ NDB course 051° to JEZZY INT, thence. . .

. . .continue climb-in-hold (hold northwest, right turn, 140° inbound) to 9000 before proceeding on course.

NOTE: **Rwy 8,** multiple trees 512' from departure end of runway, 584' left of centerline, 100' AGL/4859' MSL. **Rwy 26,** multiple trees, buildings, poles/lights, siren, roads w/ vehicles beginning 2' from departure end of runway, on centerline, to 488' left of centerline, 100' AGL/4899' MSL. Multiple trees, buildings, poles/ lights, roads w/ vehicles beginning 2' from departure end of runway, on centerline to 499' right of centerline, 100' AGL/4859' MSL.

WHIDBEY ISLAND NAS (AULT FIELD) (NUW)

OAK HARBOR, WA. 07186

Diverse departures not authorized.

MILITARY DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 430'/NM until 600. Climbing left turn to 2000, intercept NUW R-067, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, intercept NUW R-128, expect radar vectors to join assigned route. **Rwy 25**: Climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, intercept the NUW 11 DME ARC to join assigned route. CIVIL DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 270'/NM until 700. Climbing left turn to 2000 via heading 067°, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, via heading 128°, expect radar vectors to join assigned route. **Rwy 25**: Use published DP or climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, proceed direct CVV VOR/DME to join assigned route. TAKEOFF OBSTACLES: **Rwy 7:** Terrain, 7813' from DER, 2469' left of centerline, 276' MSL. Trees, 4274' from DER, 5472' left of centerline, 472' MSL. Trees, 5239' from DER, 6257' left of centerline, 495' MSL. Trees, 8561' from DER, 3685' left of centerline, 426' MSL. Trees, 12,561' from DER, 4814' right of centerline, 462' MSL. Terrain, 11,843' from DER, 7129' left of centerline, 502' MSL. Trees, 15,361' from DER, 4015' right of centerline, 521' MSL.

WORLAND, WY

WORLAND MUNI

TAKE-OFF MINIMUMS: **Rwys 4, 10, 22, 28**, NA. **Rwy 16**, 300-2 or std. with a min. climb of 230' per NM to 4600.

DEPARTURE PROCEDURE: **All aircraft** climb to 5000, then direct RLY VOR/DME. Aircraft departing RLY R-061 CW R-349 climb on course. All others continue climb in RLY VOR/DME holding pattern (N, right turns, 159° inbound) to cross RLY VOR/DME at or above 7000.

YAKIMA, WA

YAKIMA AIR TERMINAL/MCALLISTER FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** NA. **Rwy 9**, 800-4 or std. with a min. climb of 300' per NM to 5000. **Rwys 22,27,** 2500-3 or std. with a min. climb of 300' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 4,** NA. **Rwys 9,22,27,** Use ZILLA DEPARTURE PROCEDURE.

ANACONDA, MONTANA

AL-6986 (FAA)

VOR/DME CPN 111.6 Chan 53	APP CRS 307°	Rwy ldg N/A TDZE N/A Apt Elev 5030

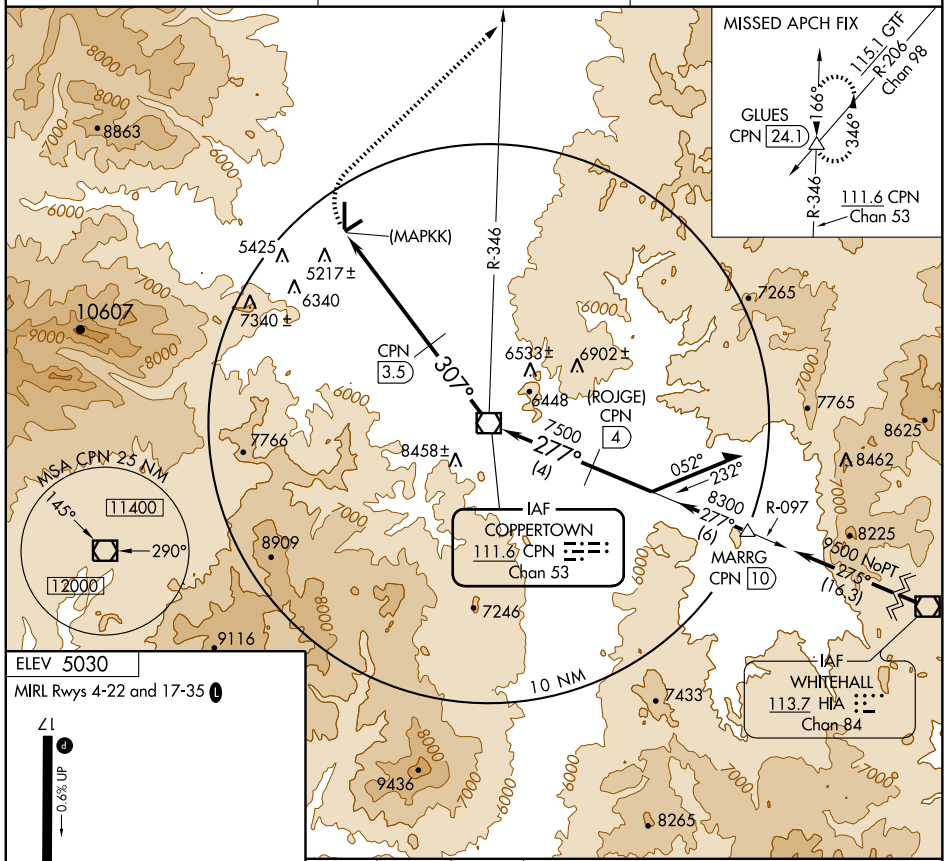
VOR/DME or GPS-A

ANACONDA/ BOWMAN FIELD (3U3)

NA — Use Butte (BTM) altimeter setting; when not received, procedure NA.

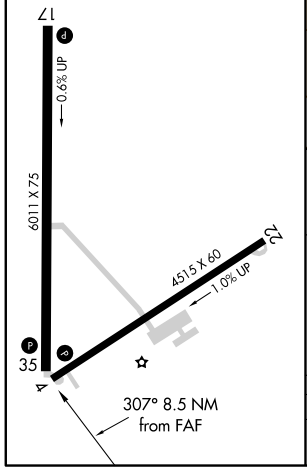
MISSED APPROACH: Climbing right turn to 9200 via heading 030° to intercept CPN R-346 to GLUES and hold.

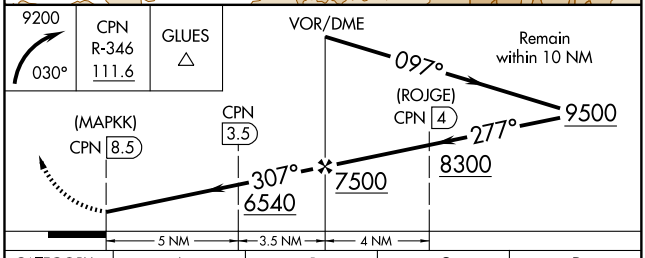
AWOS-A	SALT LAKE CENTER	UNICOM
122.8	132.4 338.3	122.8 (CTAF)



ELEV 5030

MIRL Rwys 4-22 and 17-35





CATEGORY	A	B	C	D
CIRCLING	6140-1¼ 1110 (1200-1¼)	6300-1½ 1270 (1300-1½)	6300-3 1270 (1300-3)	6540-3 1510 (1600-3)

NW-1, 08 APR 2010 to 06 MAY 2010

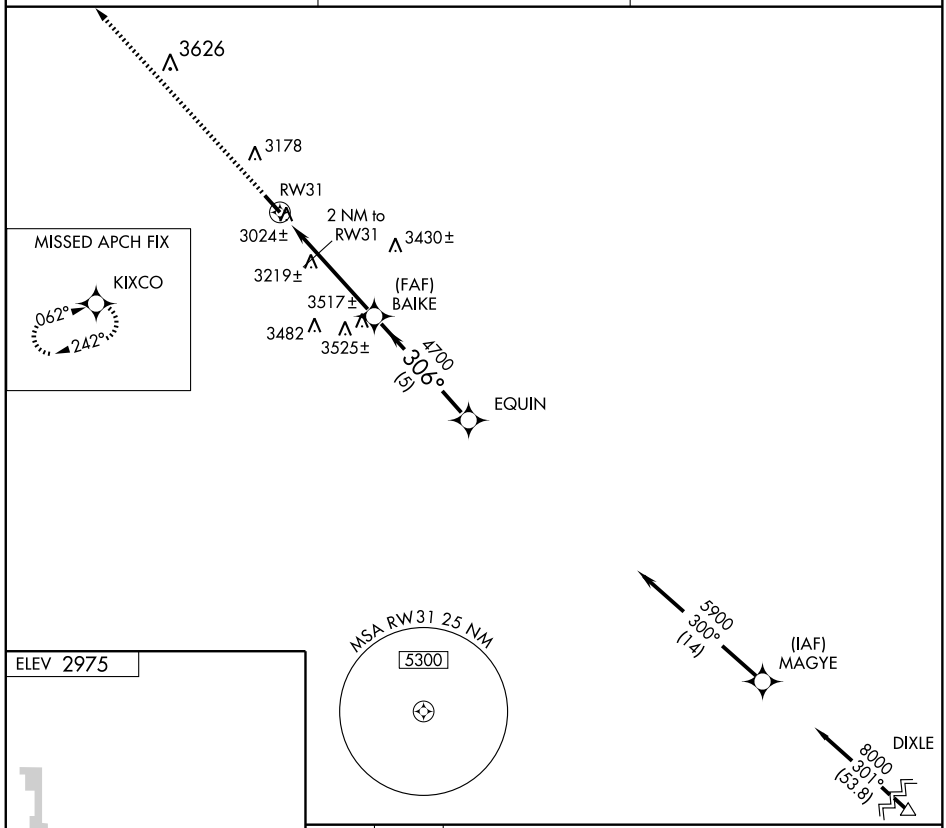
APP CRS	Rwy ldg	4898
306°	TDZE	2975
	Apt Elev	2975

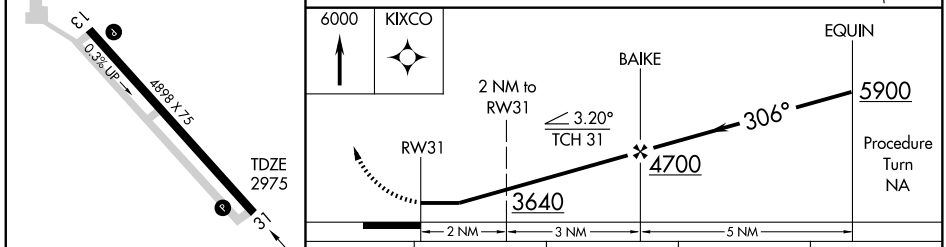
GPS RWY 31
BAKER MUNI (BHK)

NA

MISSED APPROACH: Climb to 6000 direct KIXCO WP and hold.

ASOS	SALT LAKE CENTER	CTAF
135.475	126.85 305.2	122.9





CATEGORY	A	B	C	D
S-31	3500-1	525 (600-1)	3500-1½ 525 (600-1½)	3500-1¾ 525 (600-1¾)
CIRCLING	3560-1	585 (600-1)	3560-1½ 585 (600-1½)	3560-2 585 (600-2)

MIRL Rwy 13-31

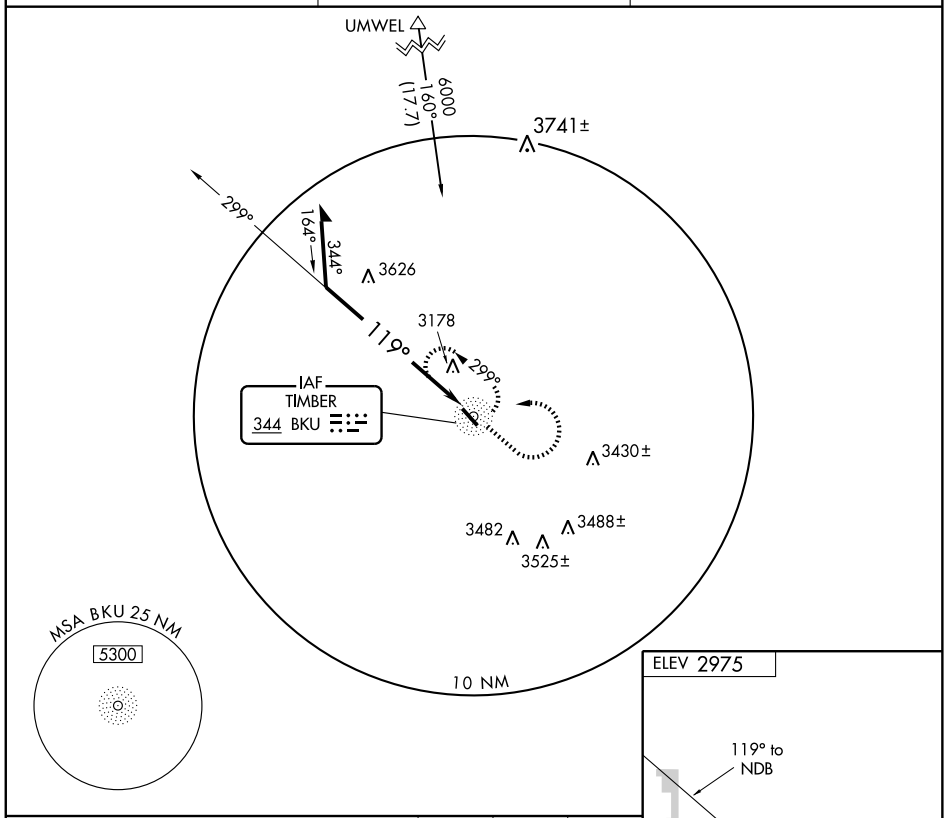
NW-1, 08 APR 2010 to 06 MAY 2010

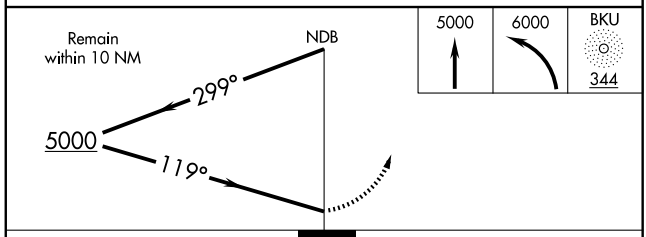
NDB BKU	APP CRS	Rwy ldg	4898
344	119°	TDZE	2974
		Apt Elev	2975

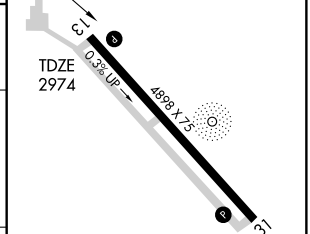
NDB RWY 13
BAKER MUNI (BHK)

MISSED APPROACH: Climb to 5000, then climbing left turn to 6000 direct BKU NDB and hold.

ASOS	SALT LAKE CENTER	CTAF
135.475	126.85 305.2	122.9 L







CATEGORY	A	B	C	D
S-13	3980-1¼ 1006 (1100-1¼)	3980-1½ 1006 (1100-1½)	3980-3	1006 (1100-3)
CIRCLING	3980-1¼ 1005 (1100-1¼)	3980-1½ 1005 (1100-1½)	3980-3	1005 (1100-3)

MIRL Rwy 13-31 L

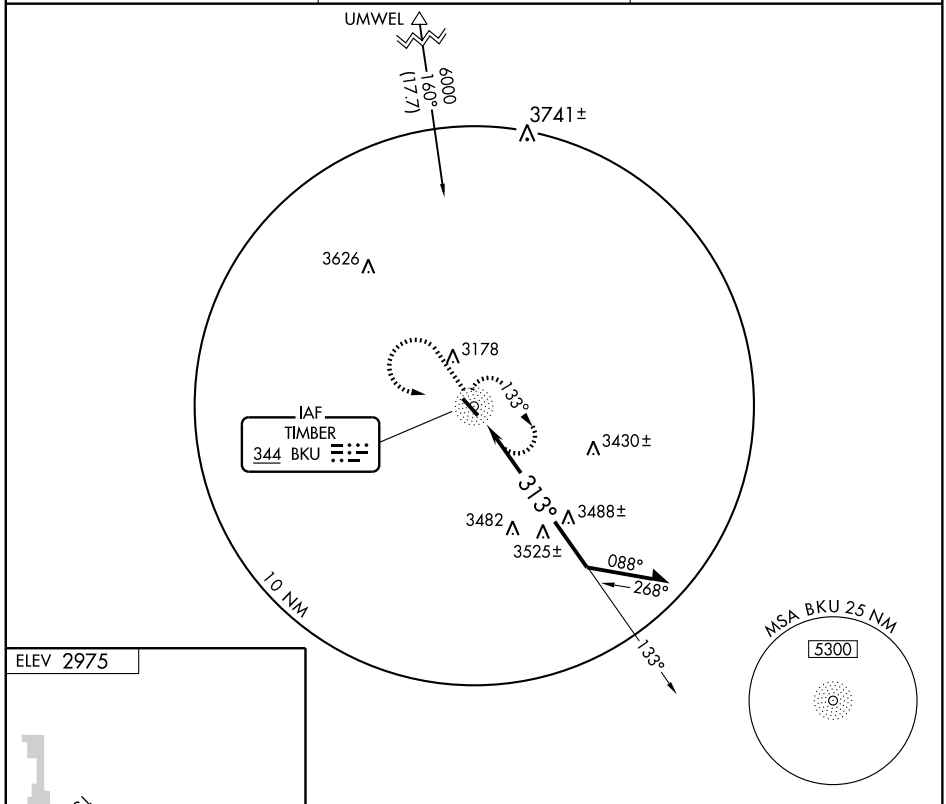
NW-1. 08 APR 2010 to 06 MAY 2010

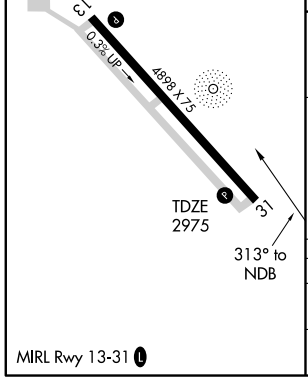
NDB BKU 344	APP CRS 313°	Rwy ldg 4898 TDZE 2975 Apt Elev 2975

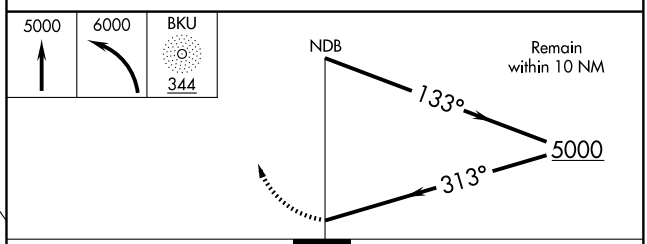
NDB RWY 31
BAKER MUNI (BHK)

MISSED APPROACH: Climb to 5000, then climbing left turn to 6000 direct BKU NDB and hold.

ASOS	SALT LAKE CENTER	CTAF
135.475	126.85 305.2	122.9 L







CATEGORY	A	B	C	D
S-31	3880-1¼ 905 (1000-1¼)		3880-2¾ 905 (1000-2¾)	3880-3 905 (1000-3)
CIRCLING	3880-1¼ 905 (1000-1¼)		3880-2¾ 905 (1000-2¾)	3880-3 905 (1000-3)

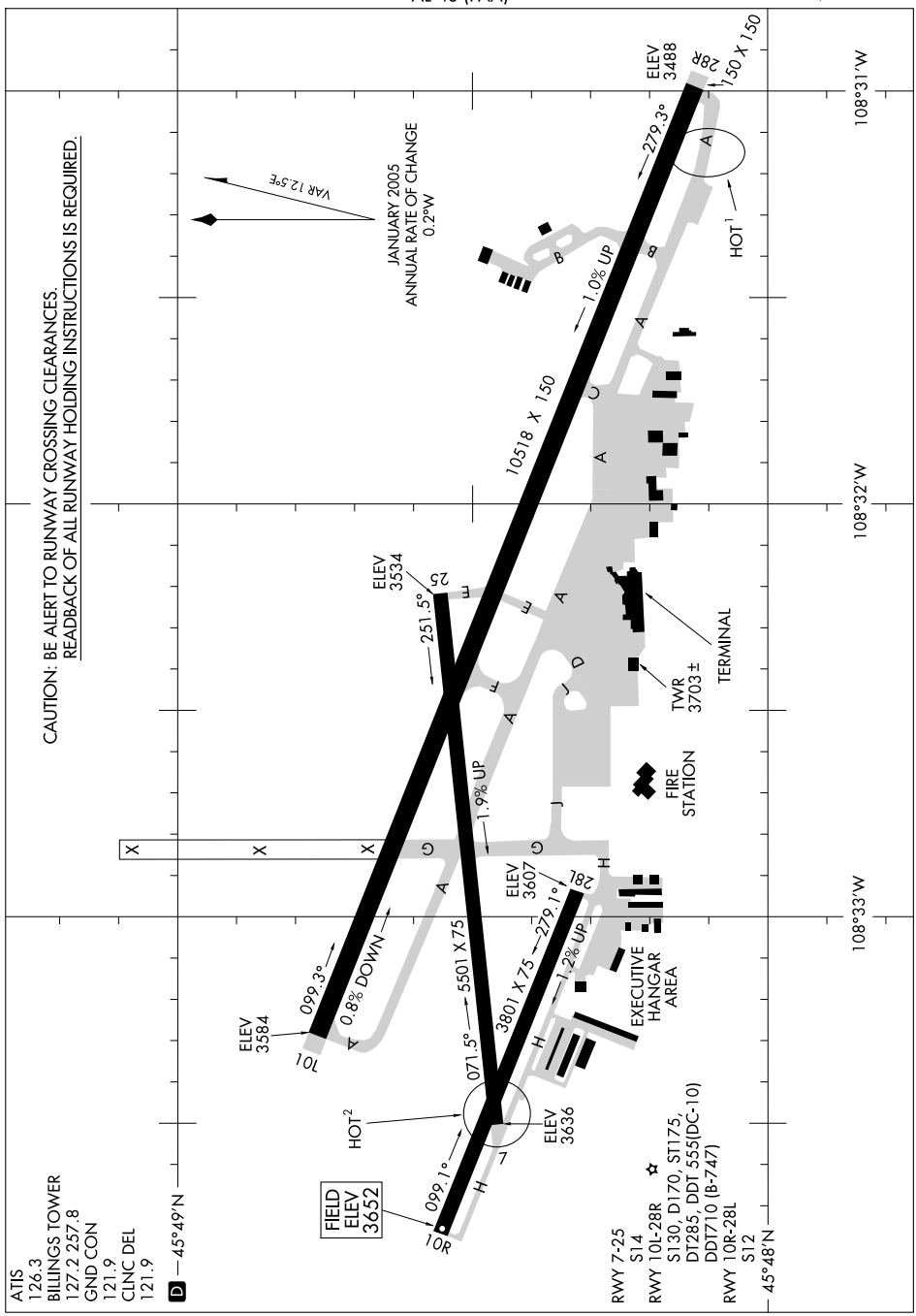
MIRL Rwy 13-31 L

NW-1. 08 APR 2010 to 06 MAY 2010

AIRPORT DIAGRAM

AL-48 (FAA)

BILLINGS LOGAN INTL (BIL)
BILLINGS, MONTANA

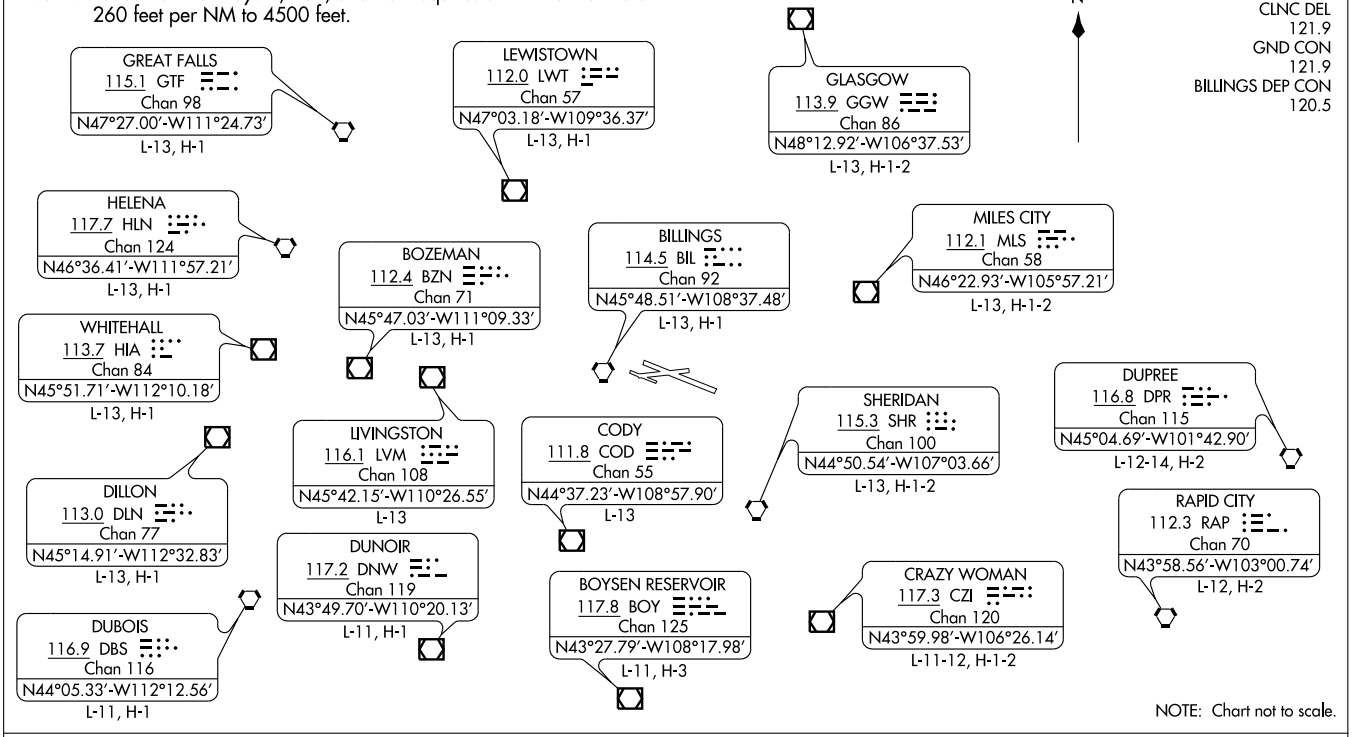


NW-1, 08 APR 2010 to 06 MAY 2010

BILLINGS TWO DEPARTURE

NOTE: Takeoff on Runways 7, 10R, and 10L requires a minimum climb of 260 feet per NM to 4500 feet.

ATIS 126.3
CLNC DEL 121.9
GND CON 121.9
BILLINGS DEP CON 120.5



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

ALL RUNWAYS: Fly assigned heading for vectors to assigned fix/route. Maintain 12,000 feet or assigned lower altitude. Expect clearance to filed altitude/flight level within 40 NM of BIL VORTAC.

LOST COMMUNICATIONS: If no transmissions are received for 1 minute after departure, fly last assigned heading until reaching 7000 feet. Proceed direct BIL VORTAC, then via last routing cleared and climb to filed altitude.

HI-ILS RWY 10L

LOCALIZER I-BIL	APCH CRS	Rwy ldg 10,518 TDZE 3584 Arpt Elev 3652
110.3	098°	

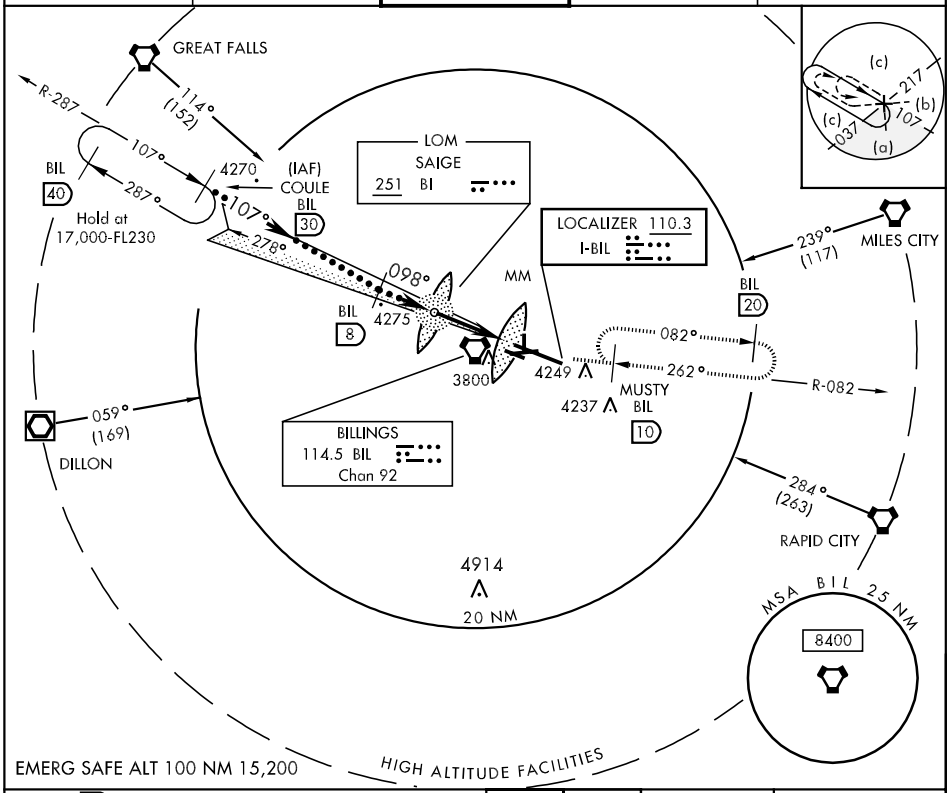
JAL-48 [USAF]

BILLINGS LOGAN INTL (KBIL)

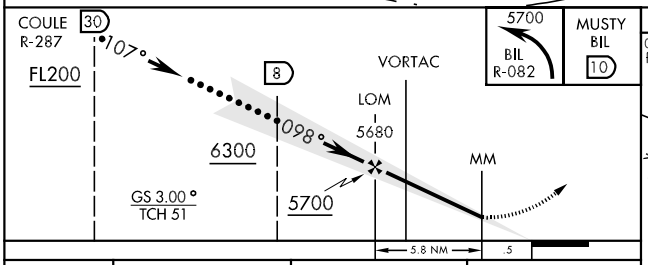
MALSR

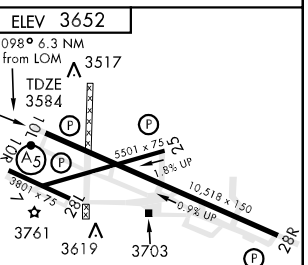
MISSED APPROACH: Climb to 5700 via BIL R-082 to MUSTY/10 DME and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9



EMERG SAFE ALT 100 NM 15,200





REIL Rwy 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwy 7-25 and 10R-28L

CATEGORY	C	D	E
S-ILS 10L	3784/24 200 (200-½)		
S-LOC 10L	4100/50 516 (500-1)	4100/60 516 (500-1¼)	
CIRCLING	4180-1½ 528 (600-1½)	4220-2 568 (600-2)	4580-3 928 (1000-3)

FAF to MAP 6.3 NM

Knots	120	140	160	180	200
Min:Sec	3:09	2:42	2:22	2:06	1:53

NW-1, 08 APR 2010 to 06 MAY 2010

HI-VOR/DME or TACAN RWY 28R

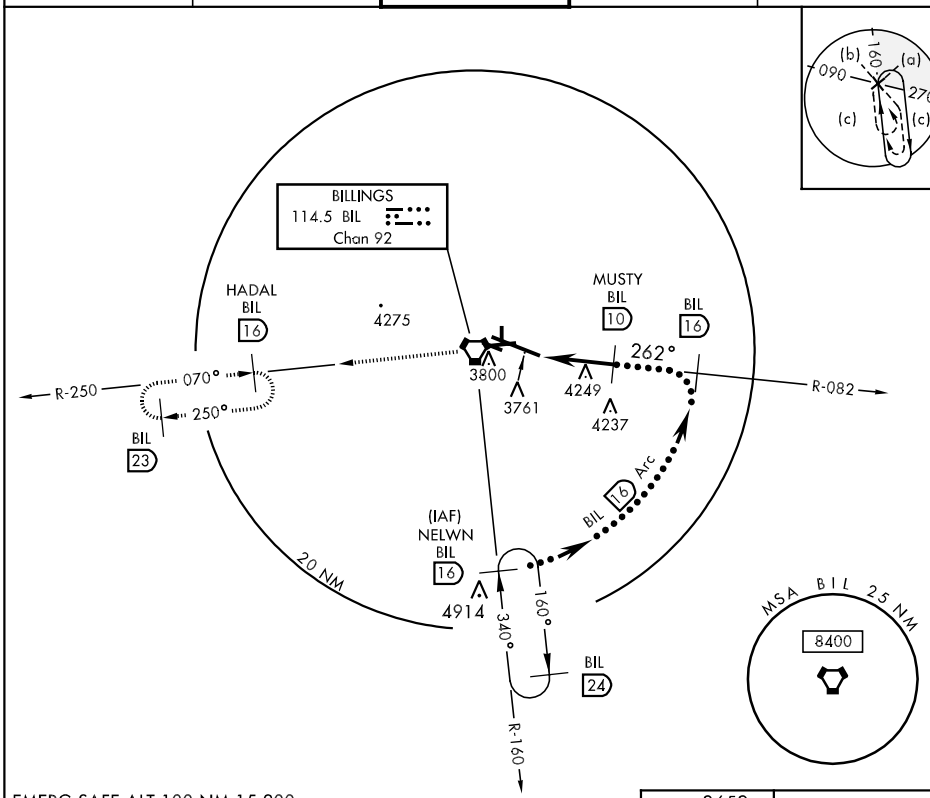
BILLINGS	APCH CRS	Rwy ldg 10,518
114.5	262°	TDZE 3517
Chan 92		Arpt Elev 3652

JAL-48 [USAF]

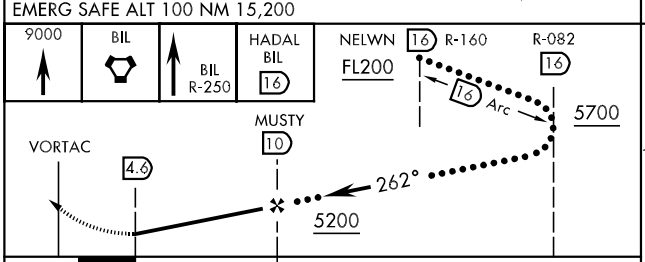
BILLINGS LOGAN INTL (KBIL)

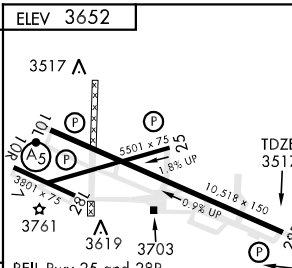
MISSED APPROACH: Climb to 9000 direct BIL VORTAC then via R-250 to HADAL/16 DME and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9



EMERG SAFE ALT 100 NM 15,200





CATEGORY	C	D	E
S-28R	3940-1¼ 423 (300-1¼)		3940-1½ 423 (300-1½)
CIRCLING	4180-1½ 528 (600-1½)	4220-2 568 (600-2)	4580-3 928 (1000-3)

FAF to MAP 5.4 NM

Knots	120	140	160	180	200
Min:Sec	2:42	2:19	2:01	1:48	1:37

LOC/DME I-BMO	APP CRS	Rwy ldg	10518
111.5	278°	TDZE	3517
Chan 52		Apt Elev	3652

ILS or LOC/DME RWY 28R

BILLINGS LOGAN INTL (BIL)

MISSED APPROACH: Climb to 4300 then climbing left turn to 6000 direct BIL VORTAC and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9

RADAR REQUIRED

BILLINGS
114.5 BIL
Chan 92

LOCALIZER 111.5
I-BMO
Chan 52

3733±

R-252 072° 252° 3800

4259

ZELAR
I-BMO 6.9

5200
278°
(5)

(IAF)
SUTLE
I-BMO 11.9

4691

098°

10 NM

MSA BIL 25 NM
6100
040° 310°
8400

ELEV 3652 D

Rwy 7-25
5501 X 75

10L
0.8% DOWN
10R
25
1.9% UP
TDZE
3517
10518 X 150
1.0% UP
28L
3761
3703±
28R
Rwy 10R-28L
3801 X 75
1.2% UP

278° 5 NM
from FAF

4300 6000 BIL 114.5

VGSI and ILS glidepath not coincident.

SUTLE
I-BMO 11.9

ZELAR
I-BMO 6.9

I-BMO
1.9

5160

278°

6000

5200

GS 3.00°
TCH 56

5 NM 5 NM

CATEGORY	A	B	C	D
S-ILS 28R	3767-1 250 (200-1)			
S-LOC 28R	4000-1 483 (400-1)		4000-1¼ 483 (400-1¼)	4000-1½ 483 (400-1½)
CIRCLING	4160-1 508 (600-1)	4180-1 528 (600-1)	4180-1½ 528 (600-1½)	4220-2 568 (600-2)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 08 APR 2010 to 06 MAY 2010

LOC I-BIL	APP CRS	Rwy ldg	10518
110.3	098°	TDZE	3584
		Apt Elev	3652

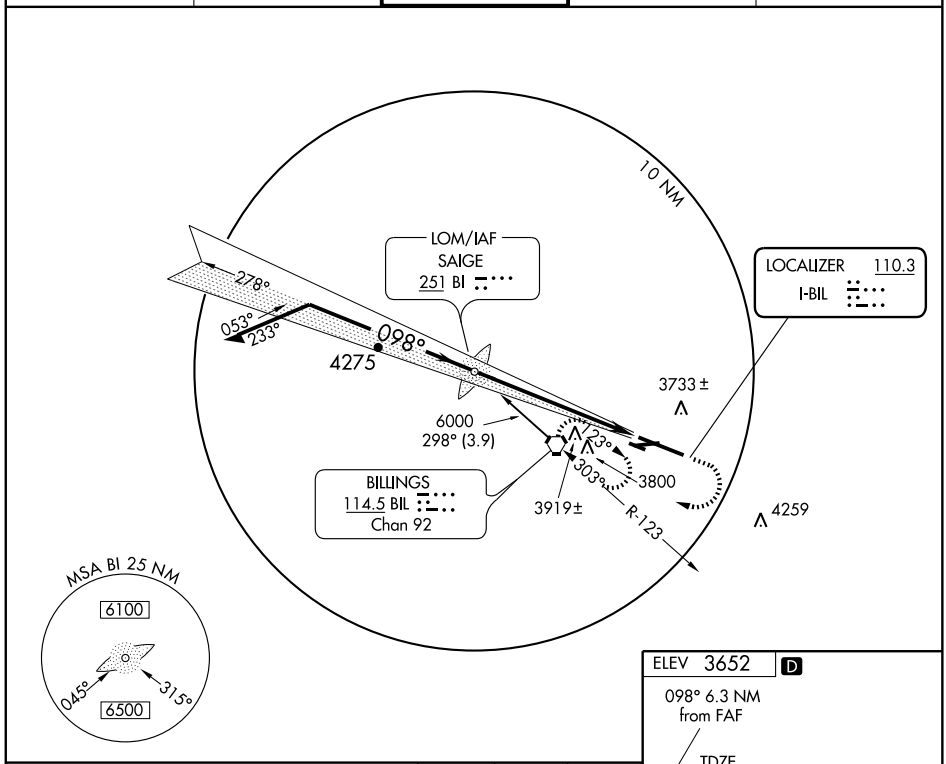
ILS or LOC RWY 10L
BILLINGS LOGAN INTL (BIL)

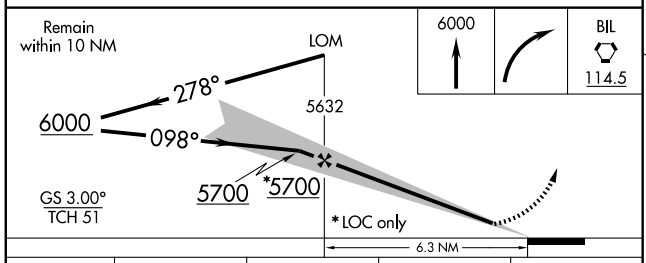
RVR 1800 authorized with the use of FD or AP or HUD to DA.

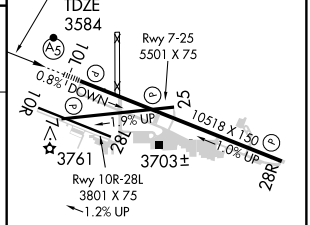
MALSR

MISSED APPROACH: Climb to 6000, then right turn direct BIL VORTAC and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

CATEGORY	A	B	C	D
S-ILS 10L	#3784/24 200 (200-½)			
S-LOC 10L	4120/24 536 (500-½)		4120/50 536 (500-1)	4120/60 536 (500-1¼)
CIRCLING	4160-1 508 (600-1)	4180-1 528 (600-1)	4180-1½ 528 (600-1½)	4220-2 568 (600-2)

FAF to MAP 6.3 NM					
Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

NW-1. 08 APR 2010 to 06 MAY 2010

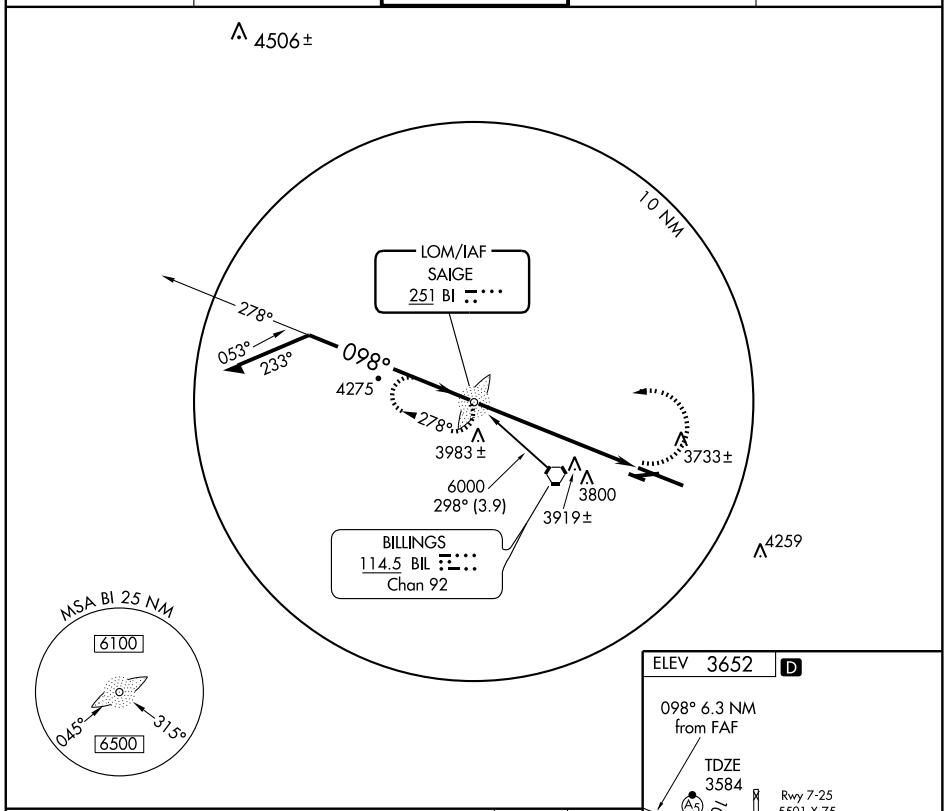
LOM BI	APP CRS	Rwy ldg	10518
251	098°	TDZE	3584
		Apt Elev	3652

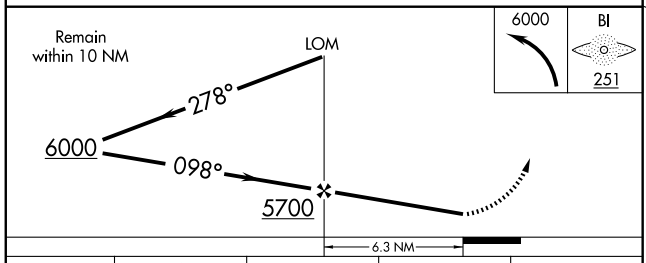
NDB RWY 10L
BILLINGS LOGAN INTL (BIL)

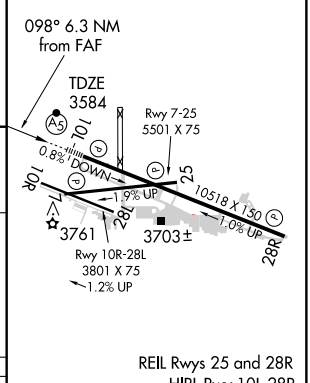
MALSR

MISSED APPROACH: Climbing left turn to 6000 direct Saige LOM and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

CATEGORY	A	B	C	D
S-10L	4300/40 716 (700-¾)		4300-1½ 716 (700-1½)	4300-2 716 (700-2)
CIRCLING	4300-1 648 (700-1)		4300-2 648 (700-2)	4300-2¼ 648 (700-2¼)

FAF to MAP 6.3 NM

Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	5501
070°	TDZE	3636
	Apt Elev	3652

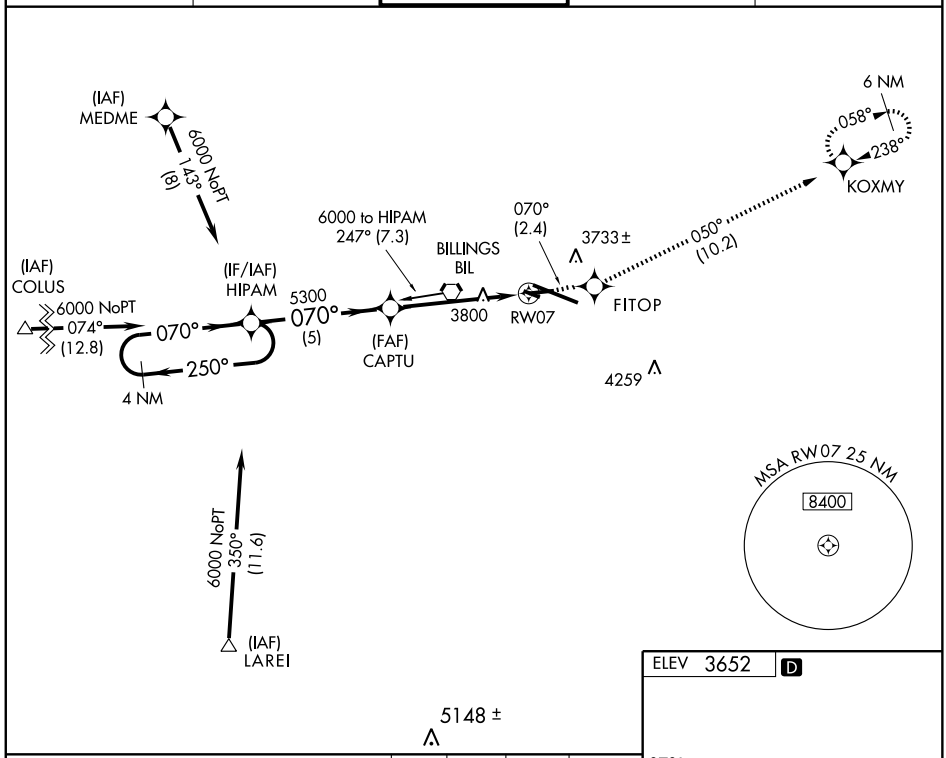
RNAV (GPS) RWY 7

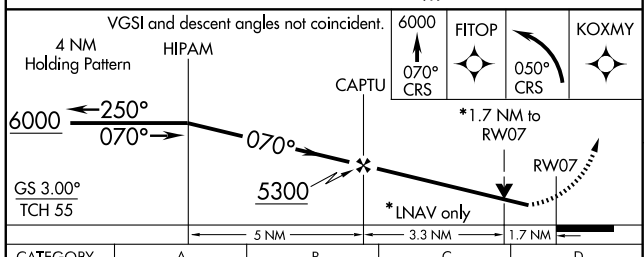
BILLINGS LOGAN INTL (BIL)

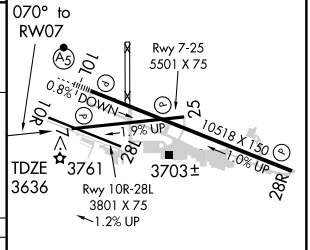
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 41°C (105°F). DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 6000 via 070° course to FITOP, then left turn via 050° course to KOXMY and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	4209-2 573 (600-2)			
LNAV MDA	4220-1 584 (600-1)		4220-1½ 584 (600-1½)	4220-1¾ 584 (600-1¾)
CIRCLING	4220-1 568 (600-1)		4220-1½ 568 (600-1½)	4220-2 568 (600-2)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1. 08 APR 2010 to 06 MAY 2010

WAAS CH 50122 W10A	APP CRS 098°	Rwy ldg 10518 TDZE 3584 Apt Elev 3652

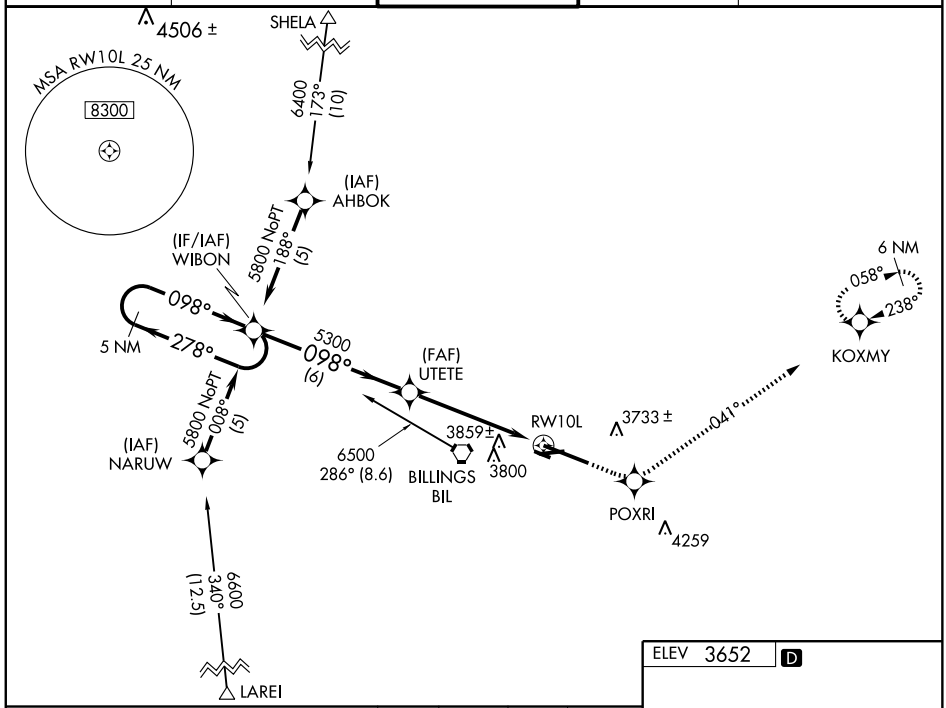
RNAV (GPS) RWY 10L
BILLINGS LOGAN INTL (BIL)

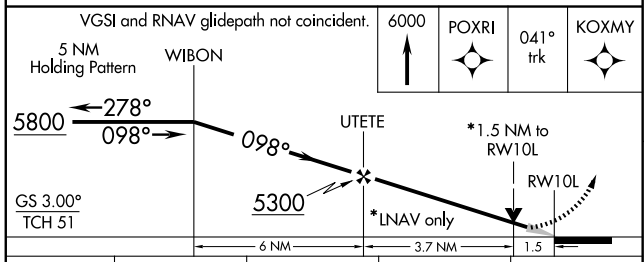
Baro-VNAV NA below -22°C (-7°F).
DME/DME RNP- 0.3 NA.
Inoperative table does not apply to LNAV/VNAV.
For inoperative MALSR increase LPV visibility to RVR 6000 all Cats.

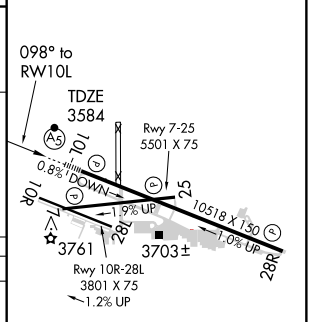
MALSR A5

MISSED APPROACH: Climb to 6000 direct POXRI and via 041° track to KOXMY and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







CATEGORY	A	B	C	D
LPV DA	3950/40 366 (300-¾)			
LNAV/VNAV DA	4200-2¼ 616 (600-2¼)			
LNAV MDA	4120/24 536 (500-½)		4120/50 536 (500-1)	4120/60 536 (500-1¼)
CIRCLING	4200-2¼ 548 (600-2¼)			4220-2¼ 568 (600-2¼)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 08 APR 2010 to 06 MAY 2010

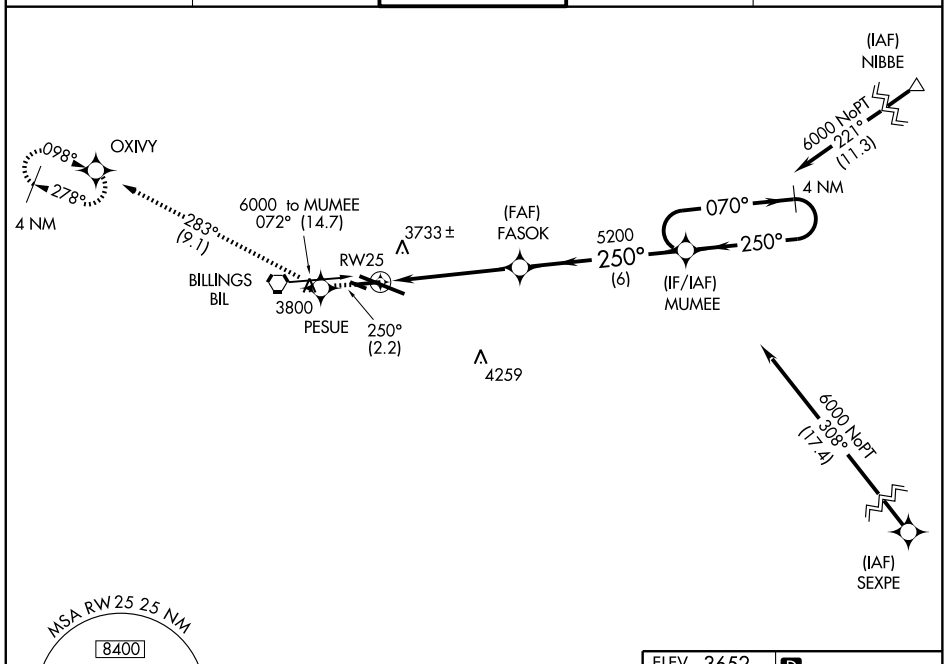
APP CRS	Rwy ldg	5501
250°	TDZE	3586
	Apt Elev	3652

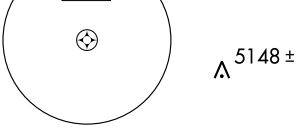
RNAV (GPS) RWY 25
BILLINGS LOGAN INTL (BIL)

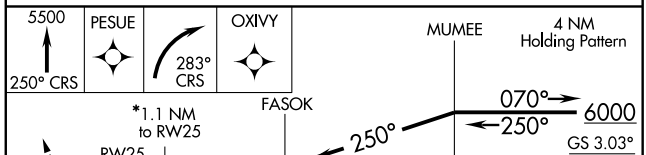
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 5500 via 250° course to PESUE WP then right turn via 283° course to OXIVY and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9

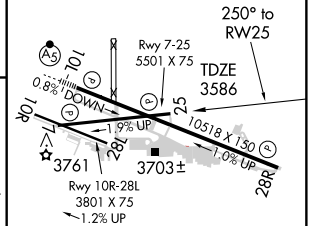






CATEGORY	A	B	C	D
LNAV MDA	4020-1 434 (400-1)		4020-1¼ 434 (400-1¼)	4020-1½ 434 (400-1½)
CIRCLING	4160-1¼ 508 (600-1¼)	4180-1¼ 528 (600-1¼)	4180-1½ 528 (600-1½)	4220-2 568 (600-2)

ELEV 3652 D



REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 08 APR 2010 to 06 MAY 2010

BILLINGS, MONTANA

AL-48 (FAA)

WAAS CH 56222 W28A	APP CRS 278°	Rwy ldg 10518 TDZE 3517 Apt Elev 3652

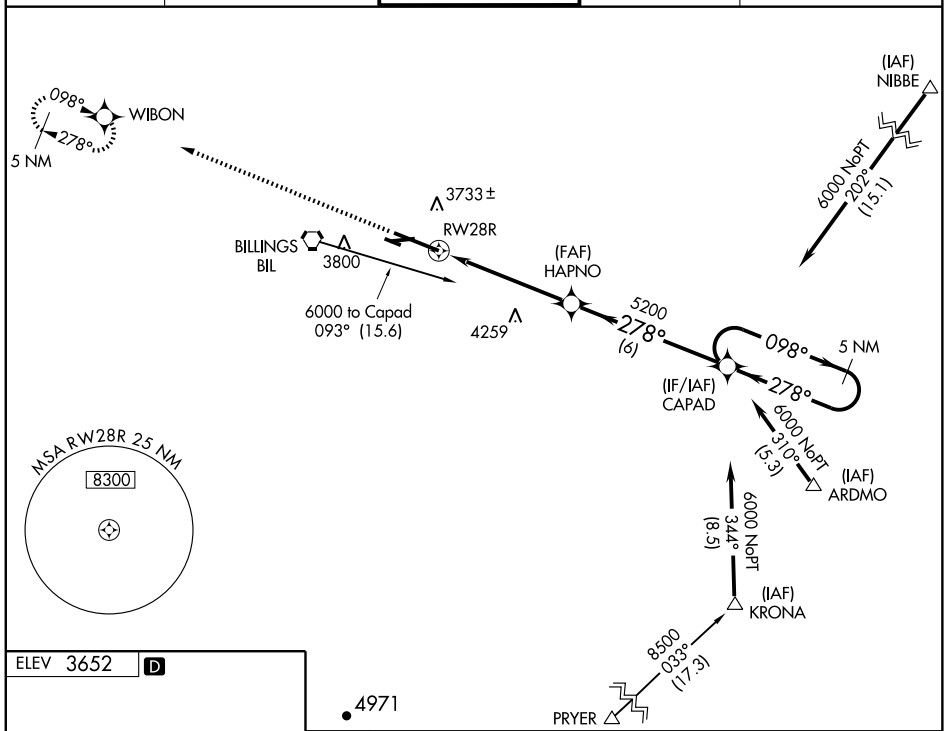
RNAV (GPS) RWY 28R

BILLINGS LOGAN INTL (BIL)

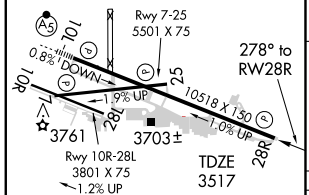
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 41°C (105°F).
DME/DME RNP- 0.3 NA

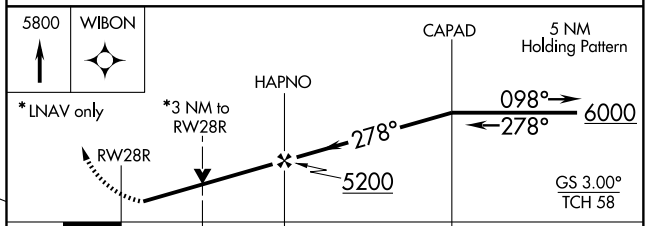
MISSED APPROACH: Climb to 5800 direct WIBON and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9



ELEV 3652 D





CATEGORY	A	B	C	D
LPV DA	3770-1 253 (200-1)			
LNAV/VNAV DA	3840-1¼ 323 (200-1¼)			
LNAV MDA	4500-1¼ 983 (900-1¼)	4500-1½ 983 (900-1½)	4500-3 983 (900-3)	
CIRCLING	4500-1¼ 848 (900-1¼)	4500-1½ 848 (900-1½)	4500-3 848 (900-3)	

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

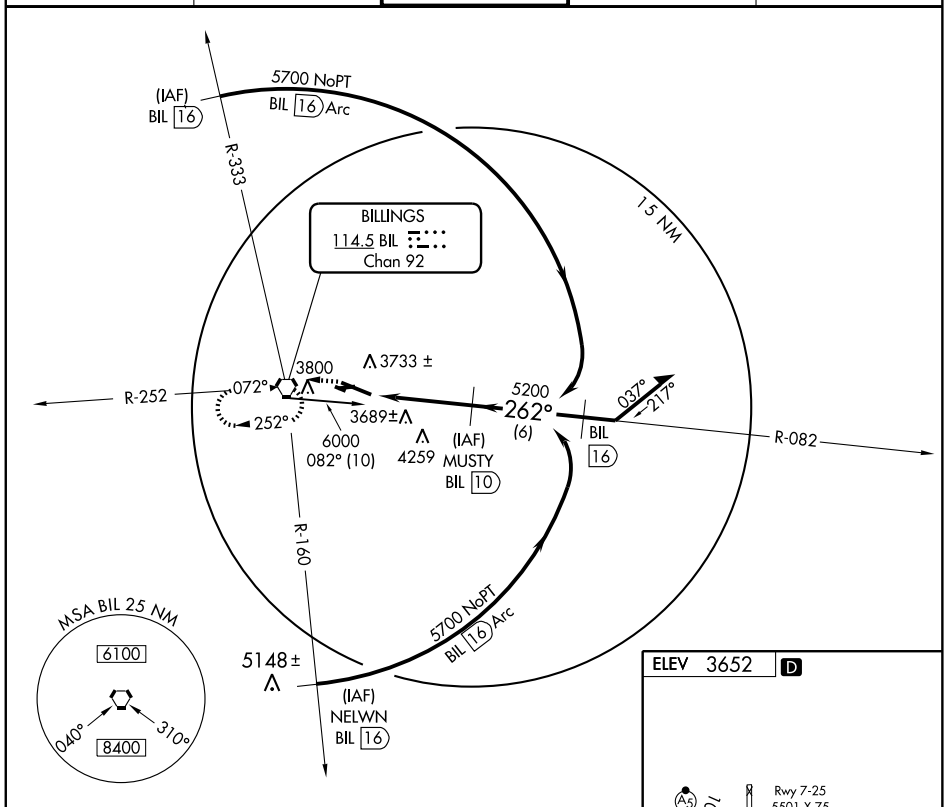
NW-1. 08 APR 2010 to 06 MAY 2010

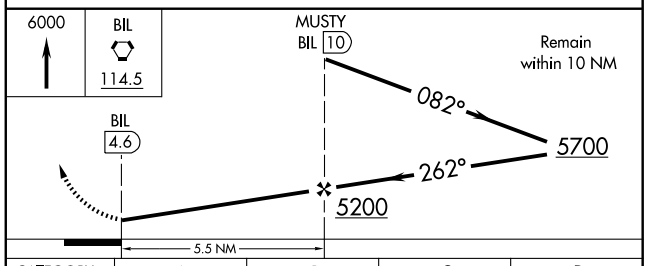
VORTAC BIL 114.5 Chan 92	APP CRS 262°	Rwy ldg 10518 TDZE 3517 Apt Elev 3652

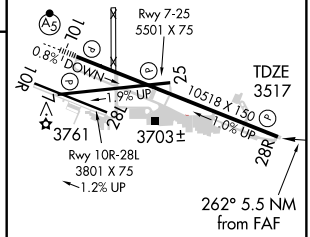
VOR/DME RWY 28R
BILLINGS LOGAN INTL (BIL)

MISSED APPROACH: Climb to 6000 direct BIL VORTAC and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







CATEGORY	A	B	C	D
S-28R	4040-1 523 (400-1)		4040-1½ 523 (400-1½)	4040-1¾ 523 (400-1¾)
CIRCLING	4160-1 508 (600-1)	4180-1 528 (600-1)	4180-1½ 528 (600-1½)	4220-2 568 (600-2)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 08 APR 2010 to 06 MAY 2010

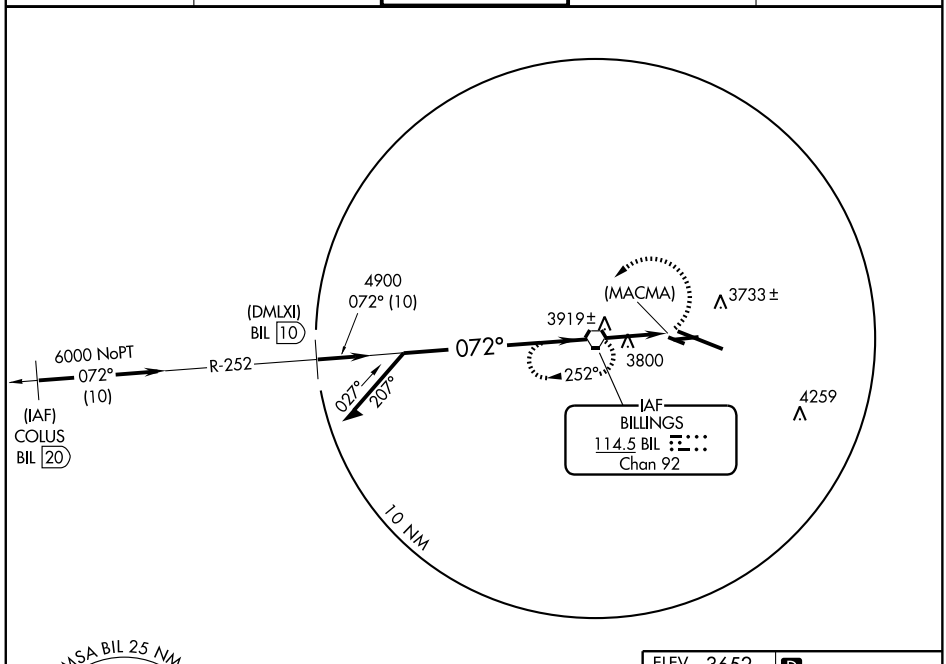
VORTAC BIL 114.5 Chan 92	APP CRS 072°	Rwy ldg N/A TDZE N/A Apt Elev 3652

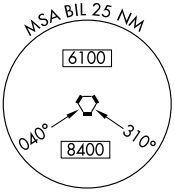
VOR or GPS-A

BILLINGS LOGAN INTL (BIL)

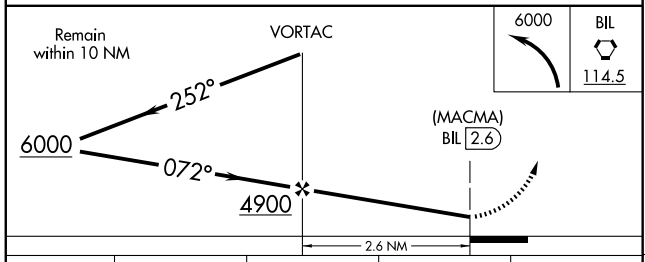
MISSED APPROACH: Climbing left turn to 6000 direct BIL VORTAC and hold.

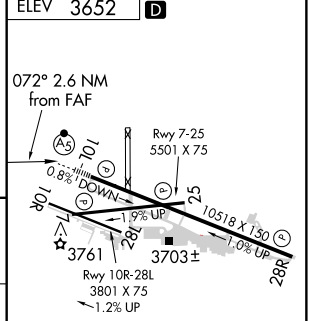
ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9





5148±





REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

CATEGORY	A	B	C	D
CIRCLING	4180-1 528 (600-1)		4180-1½ 528 (600-1½)	4220-2 568 (600-2)

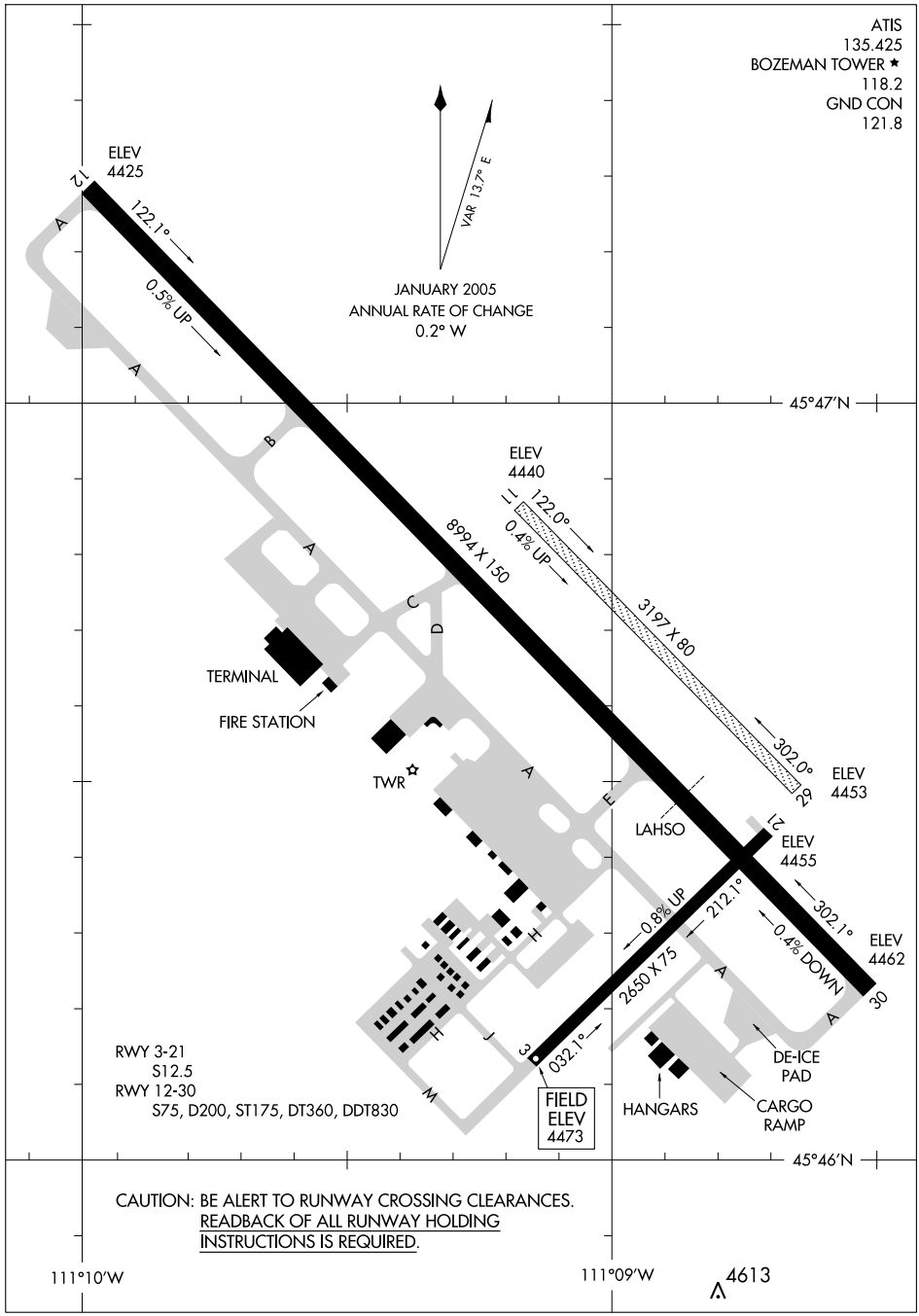
FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

NW-1. 08 APR 2010 to 06 MAY 2010

AIRPORT DIAGRAM

AL-59 (FAA)

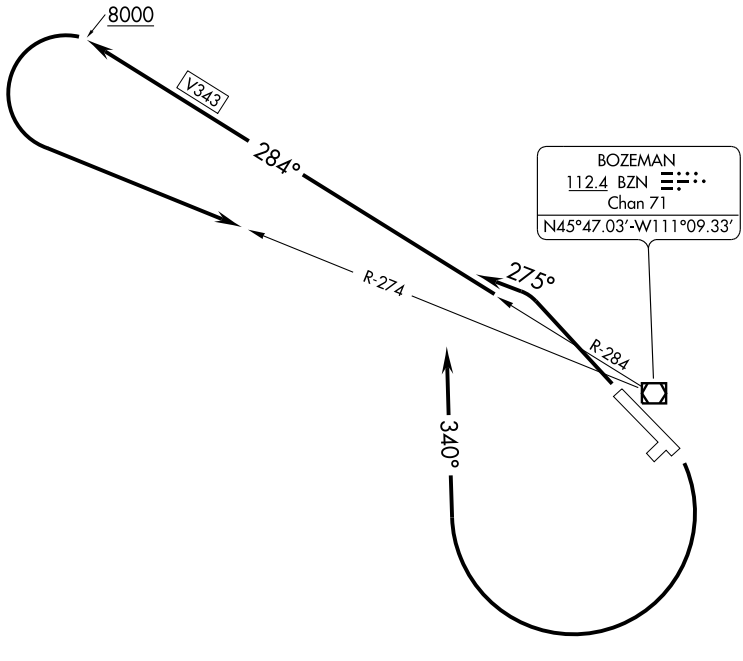
BOZEMAN/GALLATIN FIELD (BZN)
BOZEMAN, MONTANA



BOZEMAN ONE DEPARTURE (OBSTACLE)

BOZEMAN/ GALLATIN FIELD (BZN)
BOZEMAN, MONTANA

ATIS 135.425
GND CON
121.8
BOZEMAN TOWER ★
118.2 (CTAF)
SALT LAKE CITY CENTER
132.4 338.3



TAKE-OFF MINIMUMS
Rwy 3, 21: NA - ATC.
Rwy 12, 30: Standard

TAKE-OFF OBSTACLE NOTES
Rwy 30: Pole 636' from DER, 622' left of centerline, 62' AGL/4452' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 12: Climbing right turn heading 340° to intercept BZN R-284 outbound to 8000. Aircraft departing westbound via V343 climb on course, all others continue climbing left turn to intercept BZN R-274 to BZN VOR/DME, cross BZN VOR/DME at or above MCA or MEA for route of flight.

TAKE-OFF RUNWAY 30: Climbing left turn heading 275° to intercept BZN R-284 outbound to 8000. Aircraft departing westbound via V343 climb on course, all others continue climbing left turn to intercept BZN R-274 to BZN VOR/DME, cross BZN VOR/DME at or above MCA or MEA for route of flight.

NW-1. 08 APR 2010 to 06 MAY 2010

LOC I-BZN	APP CRS	Rwy ldg	8994
109.3	118°	TDZE	4439
		Apt Elev	4474

ILS RWY 12

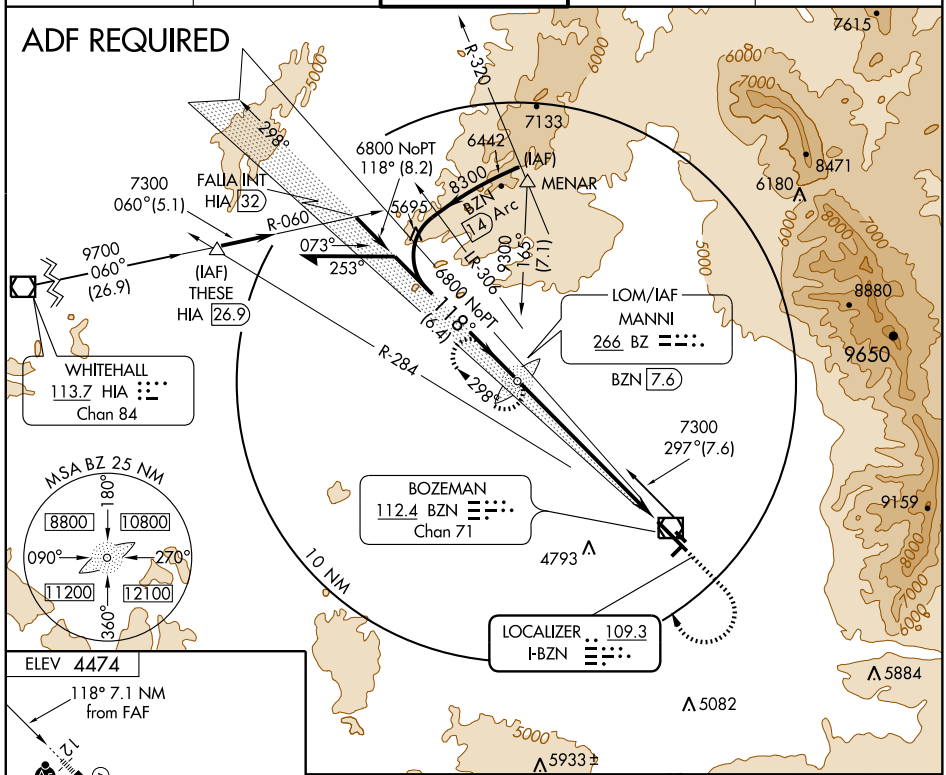
BOZEMAN/GALLATIN FIELD (BZN)

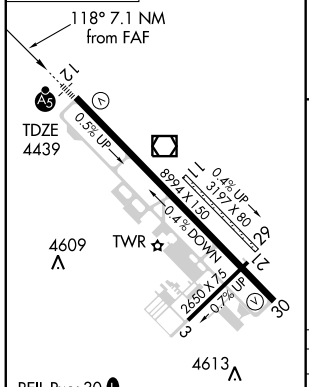
Increase S-LOC 12 Cat D visibility ¼ mile for inoperative MALSR.

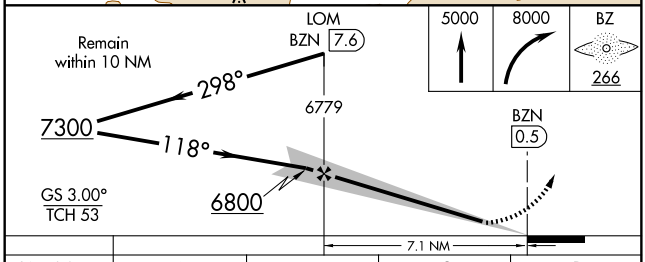
MALSR

MISSED APPROACH: Climb to 5000, then climbing right turn to 8000 direct BZ LOM and hold.

ATIS	SALT LAKE CENTER	BOZEMAN TOWER★	GND CON	UNICOM
135.425	132.4 338.3	118.2 (CTAF) L	121.8	122.95







FAF to MAP 7.1 NM					
Knots	60	90	120	150	180
Min:Sec	7:06	4:44	3:33	2:50	2:22

CATEGORY	A	B	C	D
S-ILS 12	4650-½ 211 (200-½)			
S-LOC 12	4760-½ 321 (300-½)			4760-¾ 321 (300-¾)
CIRCLING	4940-1 466 (500-1)		4940-1½ 466 (500-1½)	5040-2 566 (600-2)

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	N/A
298°	TDZE	N/A
	Apt Elev	4474

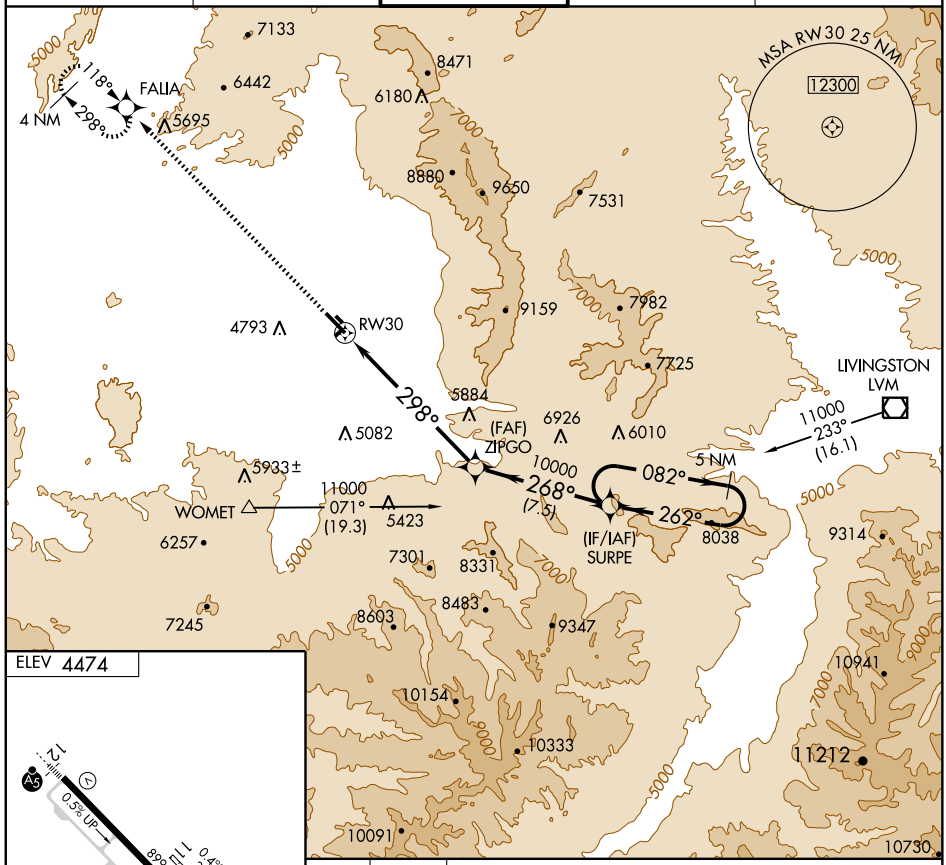
RNAV (GPS)-A
BOZEMAN/GALLATIN FIELD (BZN)

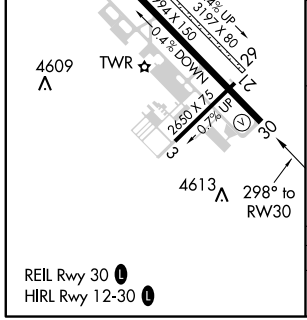
T NA

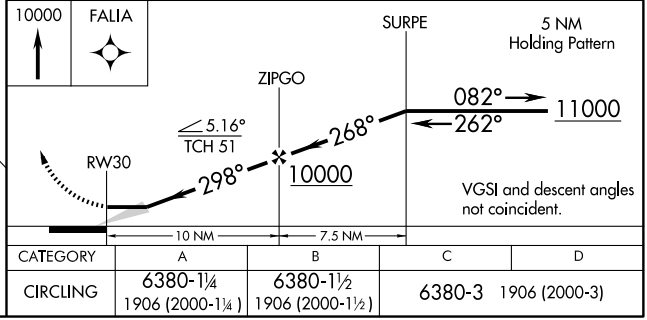
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 10000 direct FALIA WP and hold.

ATIS	SALT LAKE CENTER	BOZEMAN TOWER*	GND CON	UNICOM
135.425	132.4 338.3	118.2 (CTAF) L	121.8	122.95







REIL Rwy 30 L
HIRL Rwy 12-30 L

CATEGORY	A	B	C	D
CIRCLING	6380-1¼ 1906 (2000-1¼)	6380-1½ 1906 (2000-1½)	6380-3 1906 (2000-3)	

NW-1, 08 APR 2010 to 06 MAY 2010

VOR/DME BZN 112.4 Chan 71	APP CRS 109°	Rwy ldg 8994 TDZE 4439 Apt Elev 4474

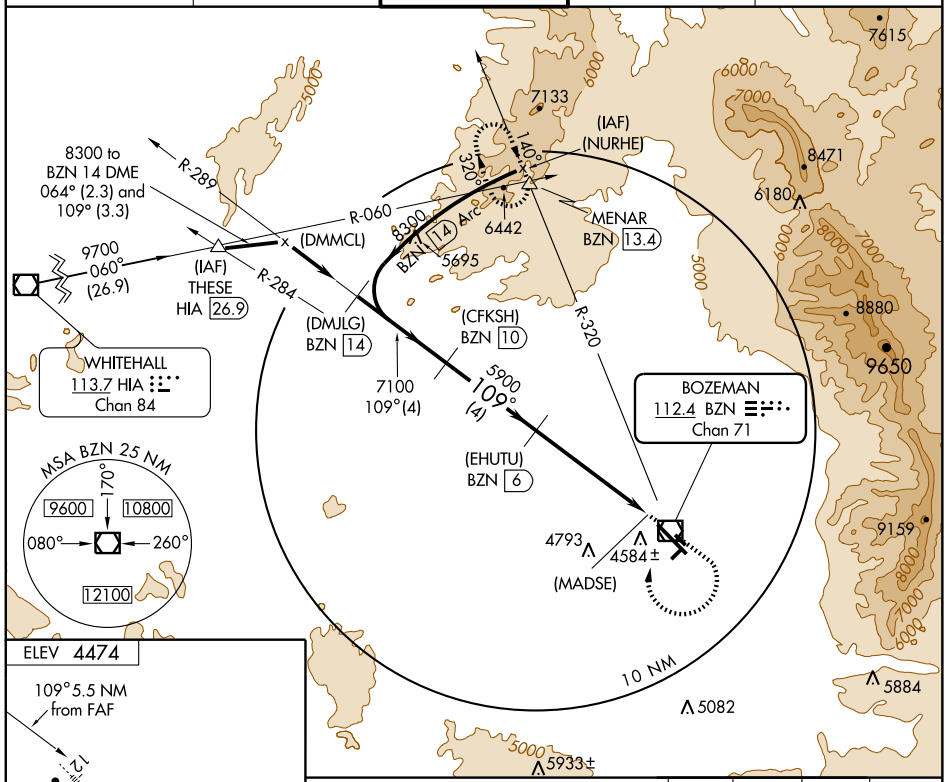
VOR/DME or GPS RWY 12

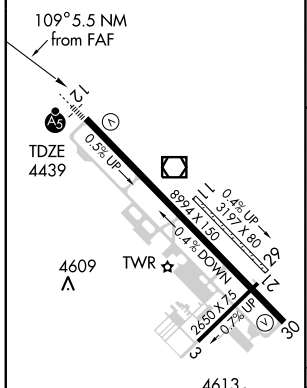
BOZEMAN/ GALLATIN FIELD (BZN)

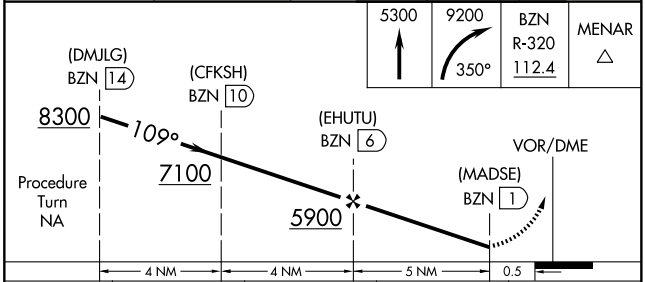
MALSR

MISSED APPROACH: Climb to 5300, then a climbing right turn to 9200 via heading 350° to intercept BZN R-320, then via BZN R-320 to MENAR Int and hold.

ATIS	SALT LAKE CENTER	BOZEMAN TOWER★	GND CON	UNICOM
135.425	132.4 338.3	118.2 (CTAF) L	121.8	122.95







CATEGORY	A	B	C	D
S-12	4900-½ 461 (500-½)		4900-¾ 461 (500-¾)	4900-1 461 (500-1)
CIRCLING	4940-1 466 (500-1)		4940-1½ 466 (500-1½)	5040-2 566 (600-2)

NW-1, 08 APR 2010 to 06 MAY 2010

VOR/DME BZN 112.4 Chan 71	APP CRS 101°	Rwy ldg 8994 TDZE 4439 Apt Elev 4474

VOR RWY 12

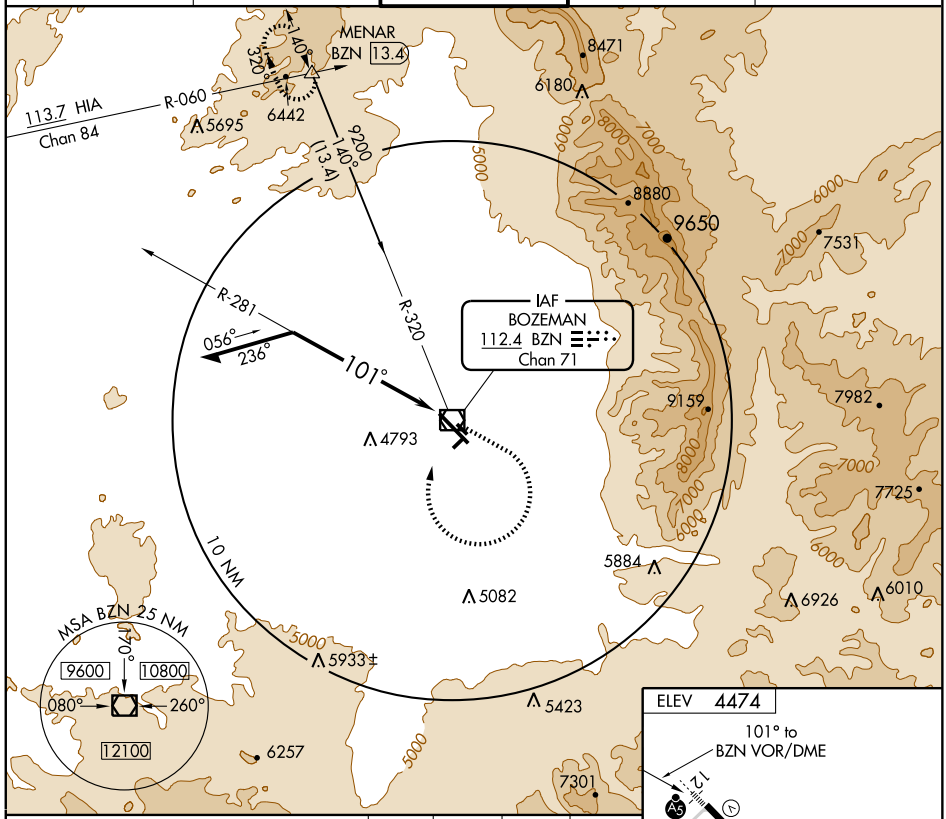
BOZEMAN/GALLATIN FIELD (BZN)

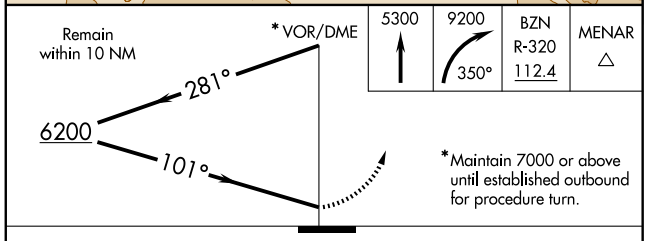
T A Inoperative table does not apply.

MALSR A5

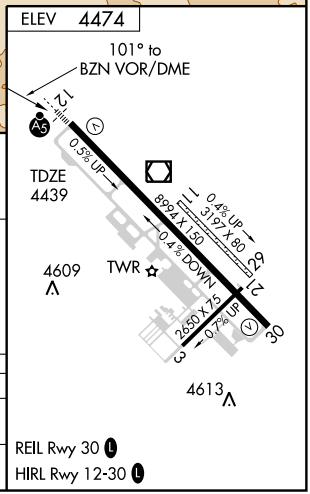
MISSED APPROACH: Climb to 5300, then climbing right turn to 9200 via heading 350° to intercept BZN R-320, then via BZN R-320 to MENAR Int and hold.

ATIS	SALT LAKE CENTER	BOZEMAN TOWER*	GND CON	UNICOM
135.425	132.4 338.3	118.2 (CTAF) L	121.8	122.95





*Maintain 7000 or above until established outbound for procedure turn.



CATEGORY	A	B	C	D
S-12	5240-1 801 (800-1)	5240-1¼ 801 (800-1¼)	5240-2¼ 801 (800-2¼)	5240-2½ 801 (800-2½)
CIRCLING	5240-1 766 (800-1)	5240-1¼ 766 (800-1¼)	5240-2¼ 766 (800-2¼)	5240-2½ 766 (800-2½)

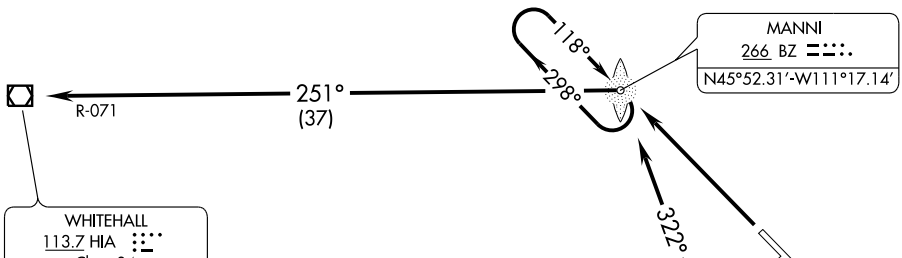
NW-1. 08 APR 2010 to 06 MAY 2010

WHITEHALL ONE DEPARTURE

SL-59 (FAA)

BOZEMAN/ GALLATIN FIELD (BZN)
BOZEMAN, MONTANA

ATIS 135.425
GND CON
121.8
BOZEMAN TOWER ★
118.2 (CTAF)
SALT LAKE CITY CENTER
132.4 338.3



NOTE: ADF REQUIRED

TAKE-OFF MINIMUMS
Rwy 3, 21: NA - ATC.
Rwy 12: Standard
Rwy 30: Standard with minimum climb of 294′ per NM to 6500.

TAKE-OFF OBSTACLE NOTES
Rwy 30: Pole 636′ from DER, 622′ left of centerline, 62′ AGL/4452′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 12: Climbing right turn to intercept 322° course to MANNI LOM. Climb in MANNI LOM holding pattern to at or above 8500, then intercept HIA R-071 to HIA VOR/DME, cross HIA VOR/DME at or above MCA or MEA for route of flight.

TAKE-OFF RUNWAY 30: Climbing left turn direct MANNI LOM. Climb in MANNI LOM holding pattern to at or above 8500, then intercept HIA R-071 to HIA VOR/DME, cross HIA VOR/DME at or above MCA or MEA for route of flight.

NW-1. 08 APR 2010 to 06 MAY 2010

LOC/DME I-BEY 110.9 Chan 46	APP CRS 151°	Rwy ldg 9001 TDZE 5523 Apt Elev 5550

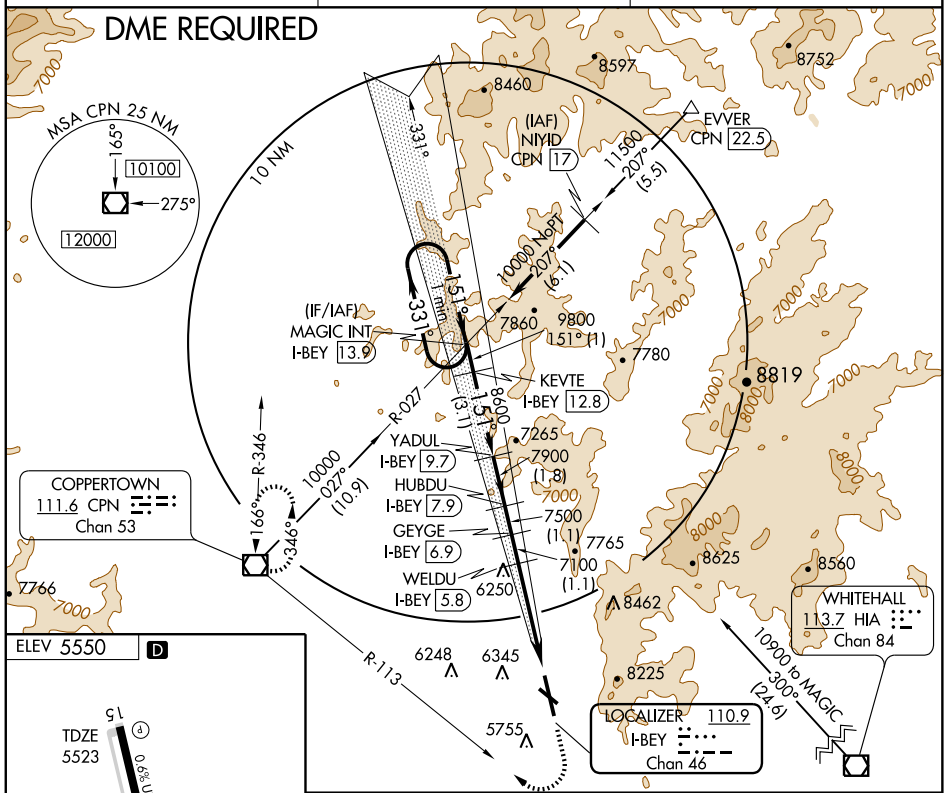
ILS Y RWY 15

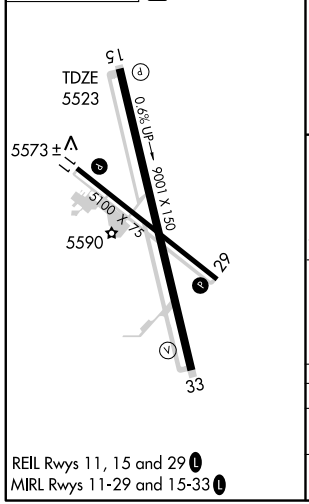
BUTTE/ BERT MOONEY (BTM)

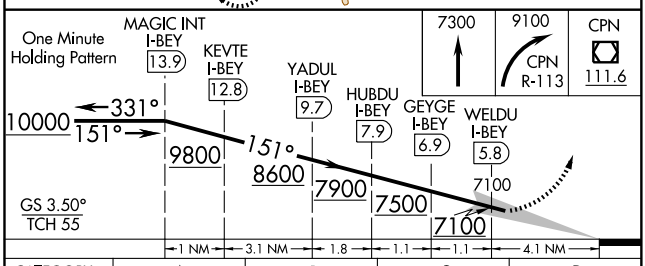
Circling NA northeast of Rwy 15-33.
When glideslope not used, use LOC/DME RWY 15 procedure.
Circling requires descent on glideslope to MDA.
Autopilot coupled approach NA.

MISSED APPROACH: Climb to 7300 then climbing right turn to 9100 via CPN VOR/DME R-113 to CPN VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 15	6711-4 1188 (1200-4)			NA
CIRCLING	6720-4 1170 (1200-4)			NA

NW-1, 08 APR 2010 to 06 MAY 2010

LOC/DME I-BEY 110.9 Chan 46	APP CRS 151°	Rwy ldg 9001 TDZE 5523 Apt Elev 5550

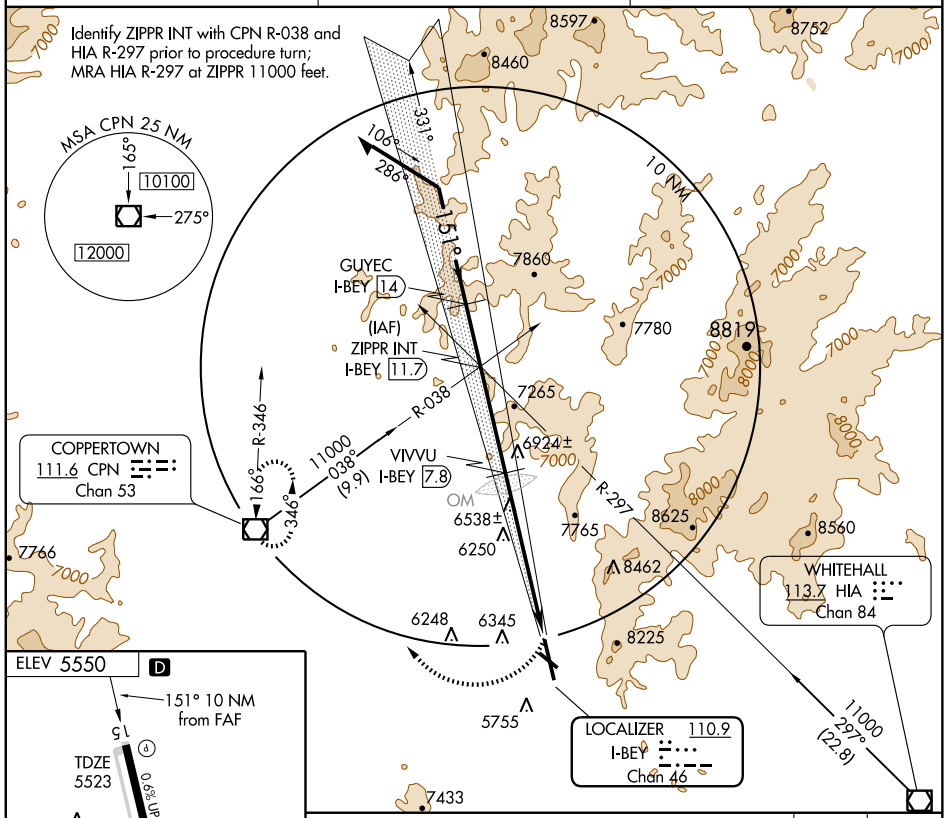
LOC/DME RWY 15

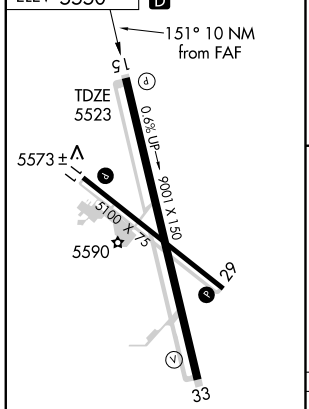
BUTTE/ BERT MOONEY (BTM)

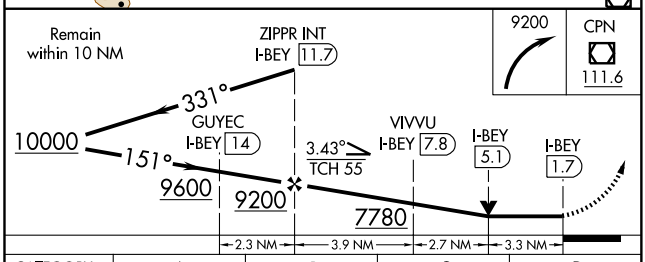
Circling not authorized NE of Rwy 15-33.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 9200 direct CPN VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-LOC 15	6800-1¼ 1277 (1300-1¼)	6800-1½ 1277 (1300-1½)	6800-3 1277 (1300-3)	
CIRCLING	6800-1¼ 1250 (1300-1¼)	6800-1½ 1250 (1300-1½)	6800-3 1250 (1300-3)	

REIL Rwys 11, 15 and 29 L
MIRL Rwys 11-29 and 15-33 L

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	9001
136°	TDZE	5523
	Apt Elev	5550

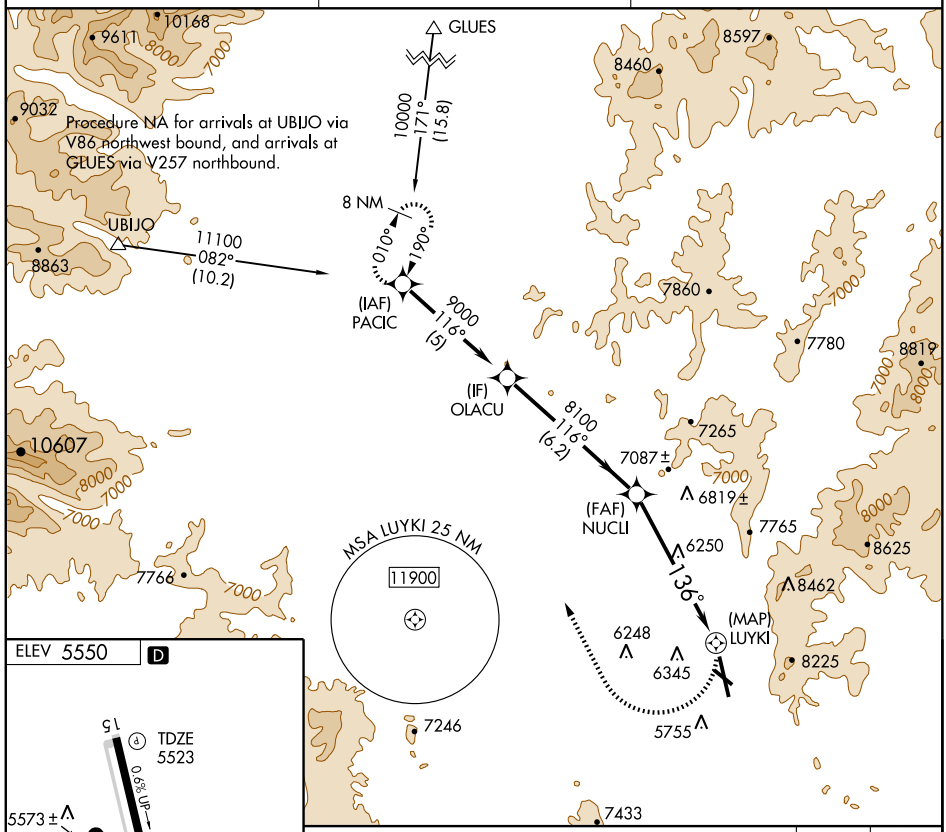
RNAV (GPS) Y RWY 15

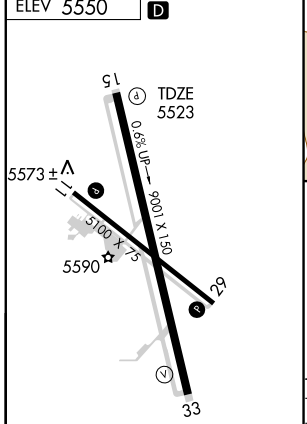
BUTTE/BERT MOONEY (BTM)

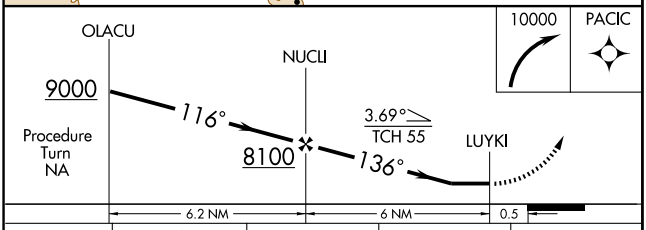
Circling NA northeast of Rwy 15-33.
DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 10000 direct PACIC and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7040-1¼ 1517 (1500-1¼)	7040-1½ 1517 (1500-1½)	7040-3 1517 (1500-3)	NA
CIRCLING	7040-1¼ 1490 (1500-1¼)	7040-1½ 1490 (1500-1½)	7040-3 1490 (1500-3)	

REIL Rwys 11, 15 and 29 L
MIRL Rwys 11-29 and 15-33 L

NW-1, 08 APR 2010 to 06 MAY 2010

WAAS CH 50599 W15A	APP CRS 151°	Rwy ldg 9001 TDZE 5523 Apt Elev 5550

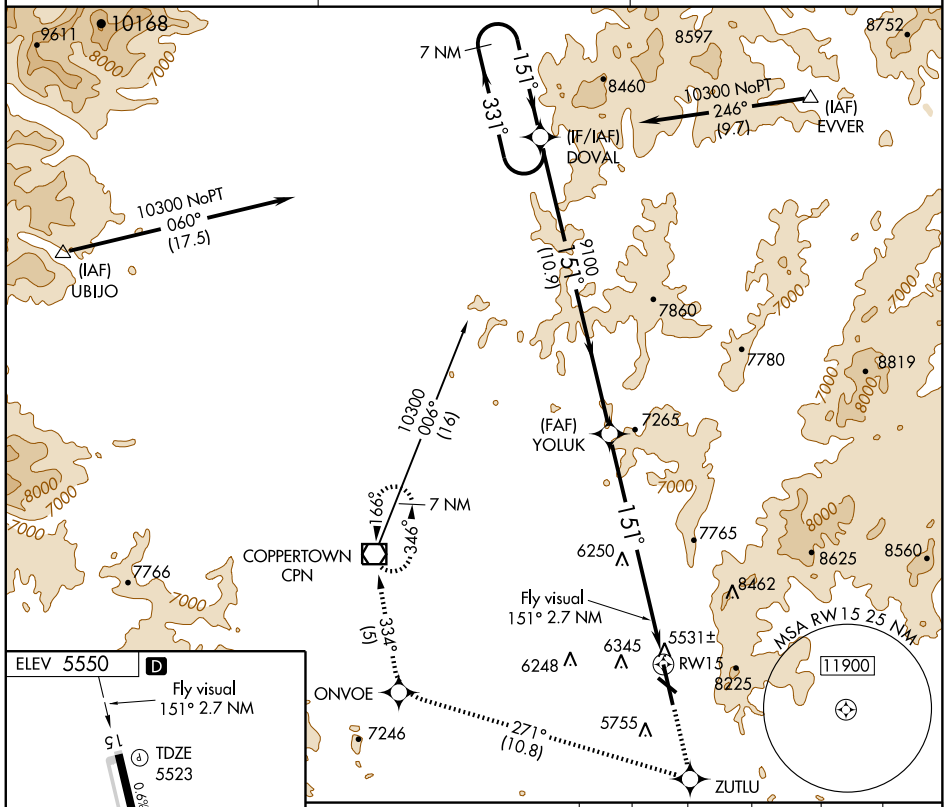
RNAV (GPS) Z RWY 15

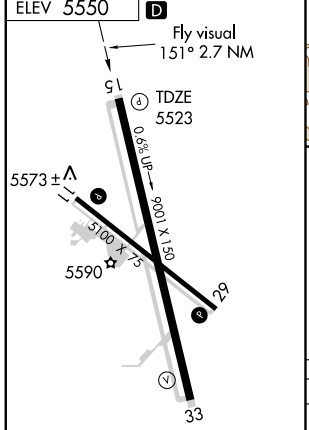
BUTTE/BERT MOONEY (BTM)

DME/DME RNP- 0.3 NA.
If local altimeter setting not received, procedure NA.

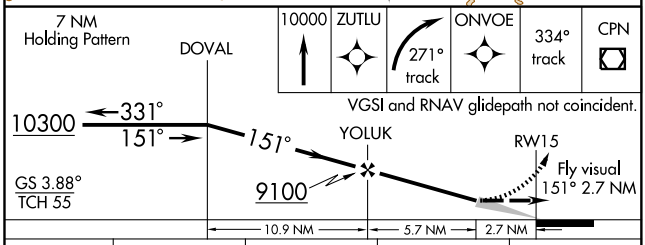
MISSED APPROACH: Climb to 10000 direct ZUTLU and right turn via 271° track to ONVOE and via 334° track to CPN VOR/DME and hold, continue climb-in-hold to 10000.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L





REIL Rwys 11, 15 and 29 L
MIRL Rwys 11-29 and 15-33 L



CATEGORY	A	B	C	D
LPV DA	6660-2	1137 (1200-2)	NA	
LNAV/VNAV DA	NA			
LNAV MDA	NA			
CIRCLING	NA			

VOR/DME HIA	APP CRS	Rwy ldg	N/A
113.7	272°	TDZE	N/A
Chan 84		Apt Elev	5545

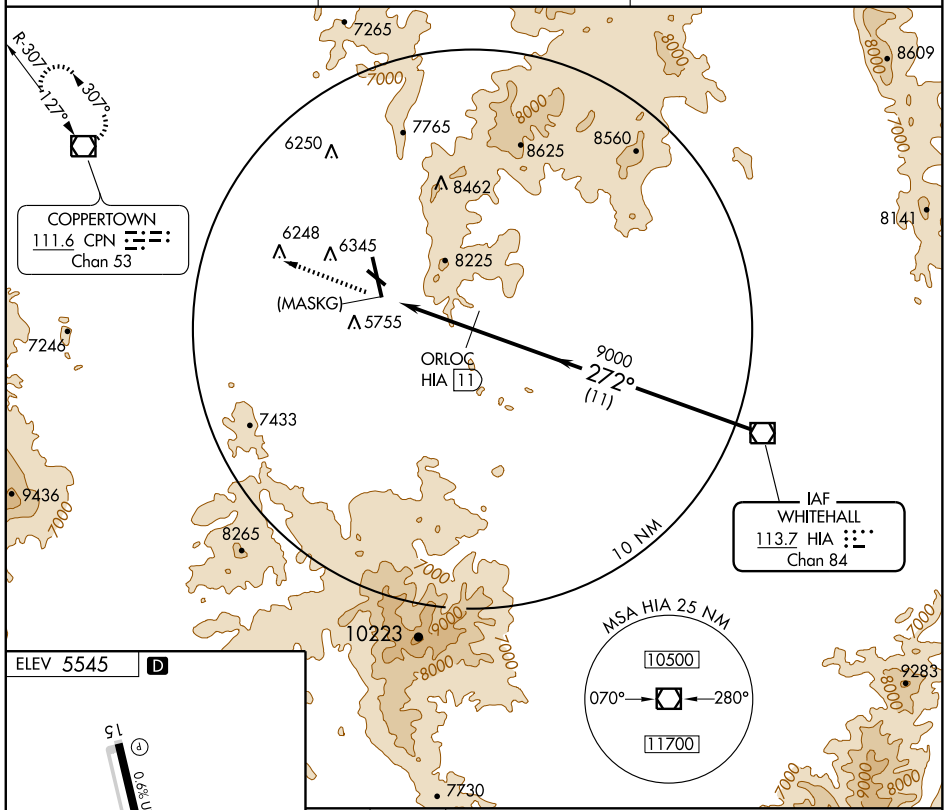
VOR/DME or GPS-A

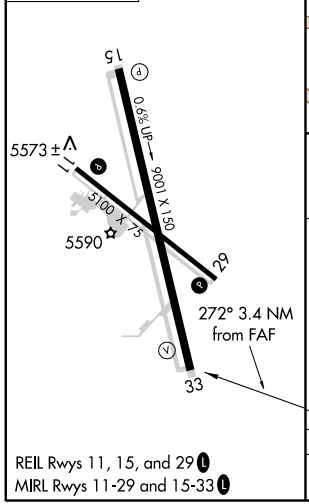
BUTTE/ BERT MOONEY (BTM)

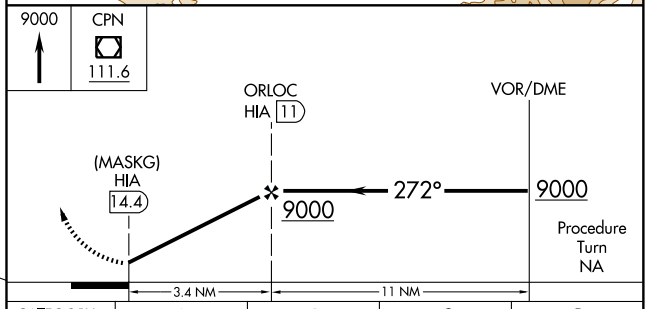
Circling NA northeast of Rwy 15-33.

MISSED APPROACH: Climb to 9000 direct CPN VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L







REIL Rwys 11, 15, and 29 L

MIRL Rwys 11-29 and 15-33 L

CATEGORY	A	B	C	D
CIRCLING	8540-1¼ 2995 (3000-1¼)	8540-1½ 2995 (3000-1½)	8540-3 2995 (3000-3)	

NW-1, 08 APR 2010 to 06 MAY 2010

VOR/DME CPN	APP CRS	Rwy ldg	N/A
111.6	097°	TDZE	N/A
Chan 53		Apt Elev	5545

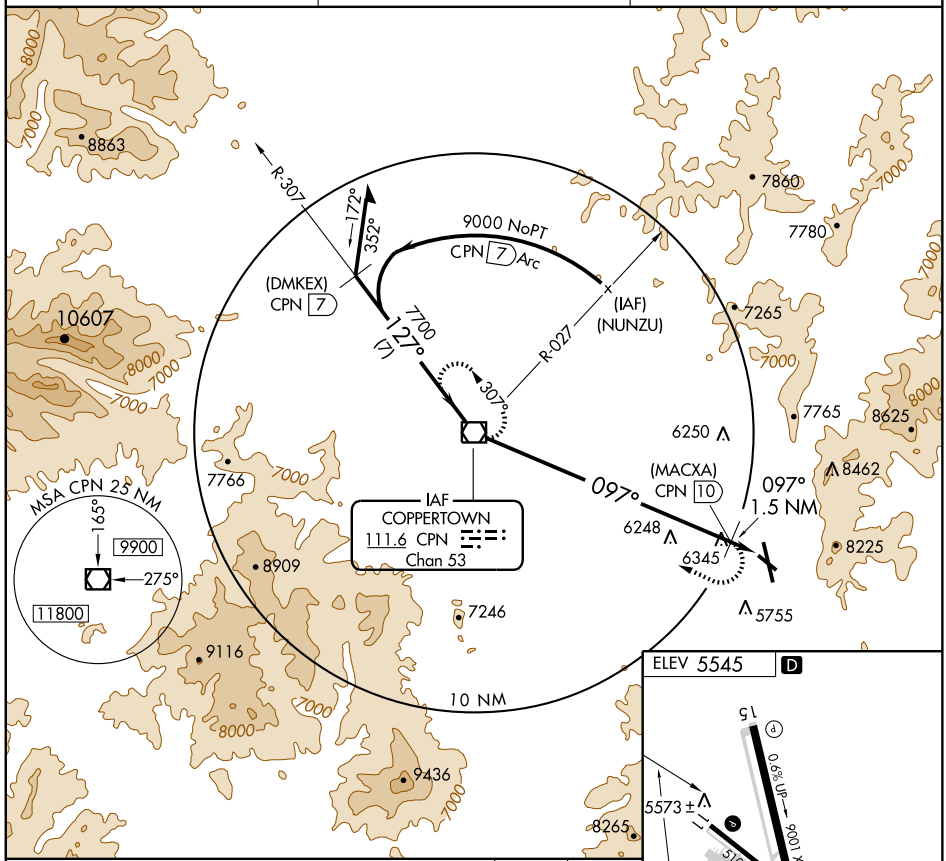
VOR or GPS-B

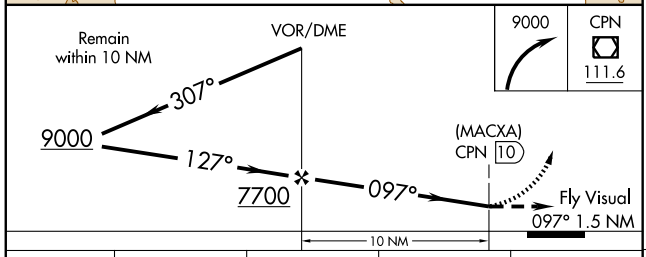
BUTTE/BERT MOONEY (BTM)

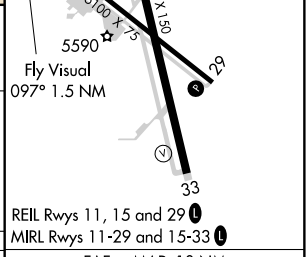
Circling not authorized NE of Rwy 15-33.

MISSED APPROACH: Climbing right turn to 9000 direct CPN VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	6900-1½ 1355 (1400-1½)		6900-3 1355 (1400-3)	

FAF to MAP 10 NM					
Knots	60	90	120	150	180
Min:Sec	10:00	6:40	5:00	4:00	3:20

NW-1. 08 APR 2010 to 06 MAY 2010

NDB CII	APP CRS	Rwy ldg	3700
269	226°	TDZE	3940
		Apt Elev	3949

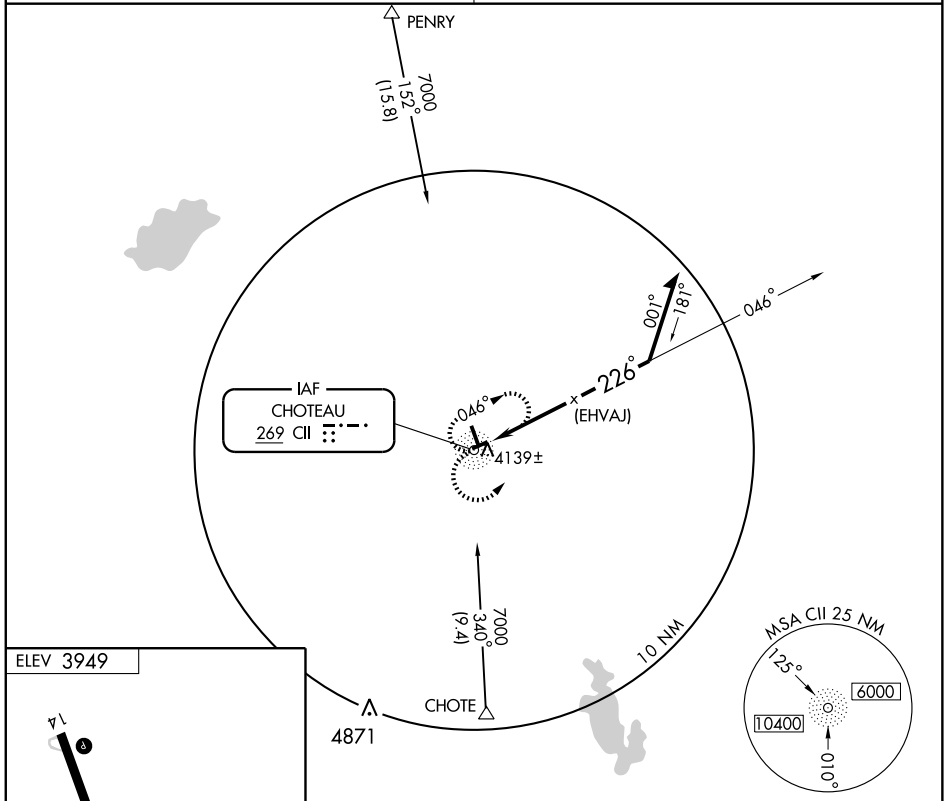
NDB or GPS RWY 23
CHOTEAU (CII)

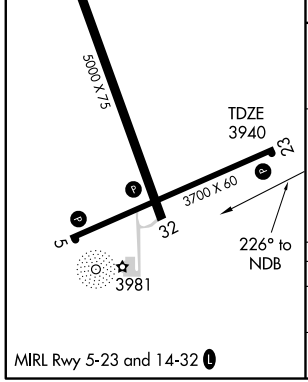
NA

Use Great Falls altimeter setting.

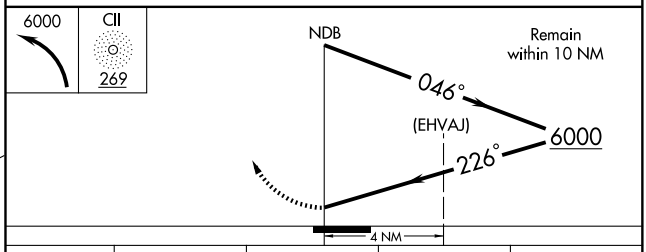
MISSED APPROACH: Climbing left turn to 6000 direct CII NDB and hold.

SALT LAKE CITY CENTER	UNICOM
133.4 285.4	122.8 (CTAF) L





MIRL Rwy 5-23 and 14-32 L

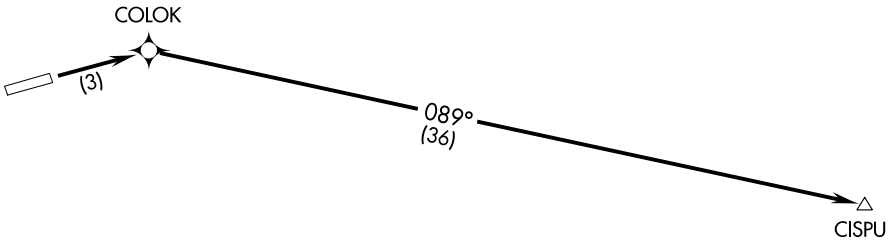


CATEGORY	A	B	C	D
S-23	4720-1 780 (800-1)	4720-1¼ 780 (800-1¼)	4720-2¼ 780 (800-2¼)	NA
CIRCLING	4720-1 775 (800-1)	4720-1¼ 775 (800-1¼)	4720-2¼ 775 (800-2¼)	NA

NW-1, 08 APR 2010 to 06 MAY 2010

CISPU ONE DEPARTURE (RNAV) (OBSTACLE)

SALT LAKE CENTER
127.75 351.9



TAKE-OFF MINIMUMS

Rwy 6: Standard.
Rwy 24: NA - ATC.

TAKE-OFF OBSTACLE NOTES

Rwy 6: Tree 1492′ from DER, 620′ right of centerline, 20′ AGL/3499′ MSL.
Tree 507′ from DER, 598′ left of centerline, 20′ AGL/3419′ MSL.

NOTE: GPS required.

NOTE: RNAV 1

NOTE: Chart not to scale.

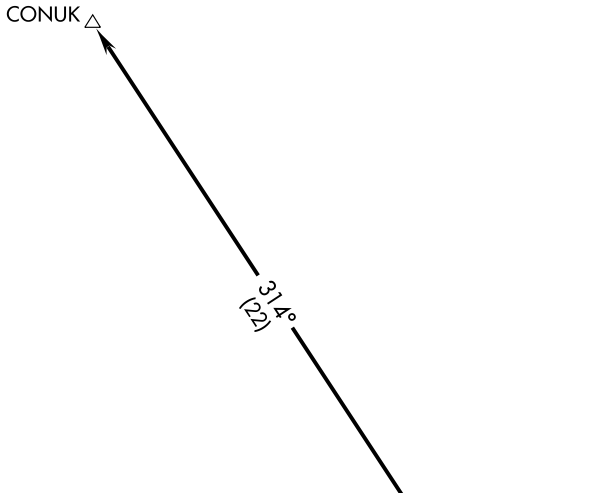
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 6: Climb direct COLOK then via 089° track to CISPU, thence....

....Maintain 9000, expect filed altitude 10 minutes after departure.

CONUK ONE DEPARTURE (RNAV) (OBSTACLE)

SALT LAKE CENTER
127.75 351.9



TAKE-OFF MINIMUMS

Rwy 6: NA - ATC.
Rwy 24: 600-3 or standard with minimum climb of 365′ per NM to 4200.

TAKE-OFF OBSTACLE NOTE

Rwy 24: Dragline 11510′ from DER, 3559′ right of centerline, 225′ AGL/3964′ MSL.

NOTE: GPS required.
NOTE: RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 24: Climb direct SITOY then via 314° track to CONUK, thence....

....Maintain 6000, expect filed altitude 10 minutes after departure.

APP CRS	Rwy ldg	5100
061°	TDZE	3426
	Apt Elev	3426

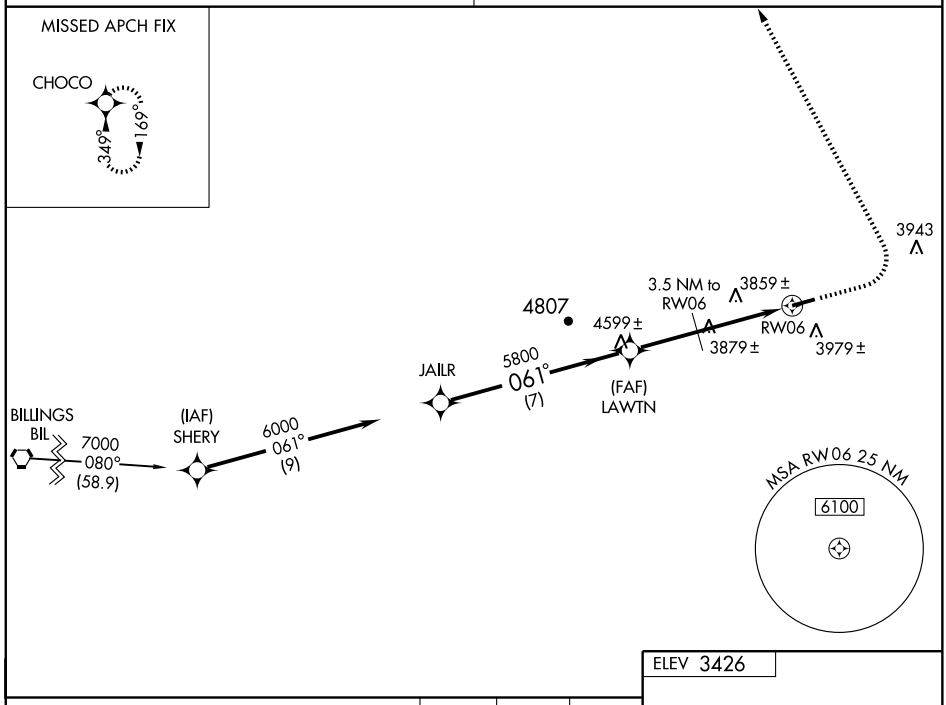
GPS RWY 6
COLSTRIP (M46)

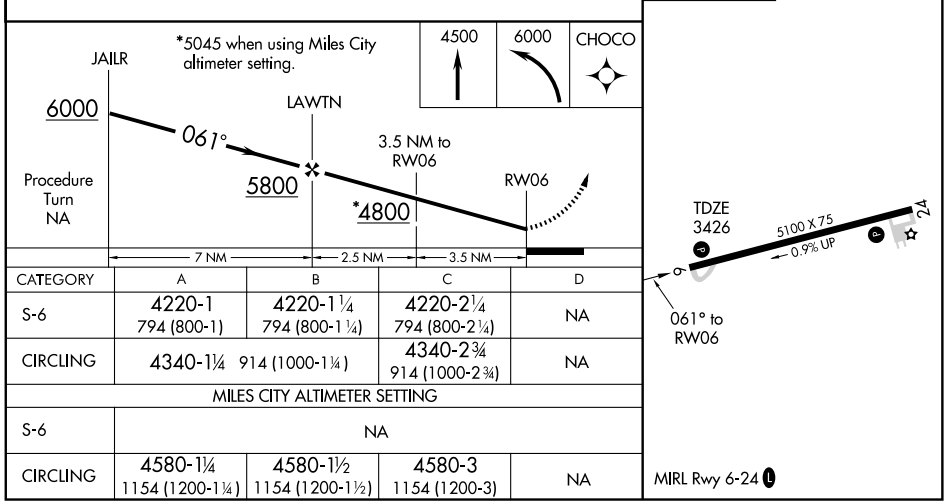
NA

When local altimeter not received use Miles City altimeter setting.

MISSED APPROACH: Climb to 4500 then climbing left turn to 6000 direct CHOCO WP and hold.

SALT LAKE CENTER	CTAF
127.75 351.9	122.9 L





CATEGORY	A	B	C	D
S-6	4220-1 794 (800-1)	4220-1¼ 794 (800-1¼)	4220-2¼ 794 (800-2¼)	NA
CIRCLING	4340-1¼ 914 (1000-1¼)		4340-2¾ 914 (1000-2¾)	NA
MILES CITY ALTIMETER SETTING				
S-6	NA			
CIRCLING	4580-1¼ 1154 (1200-1¼)	4580-1½ 1154 (1200-1½)	4580-3 1154 (1200-3)	NA

NW-1. 08 APR 2010 to 06 MAY 2010

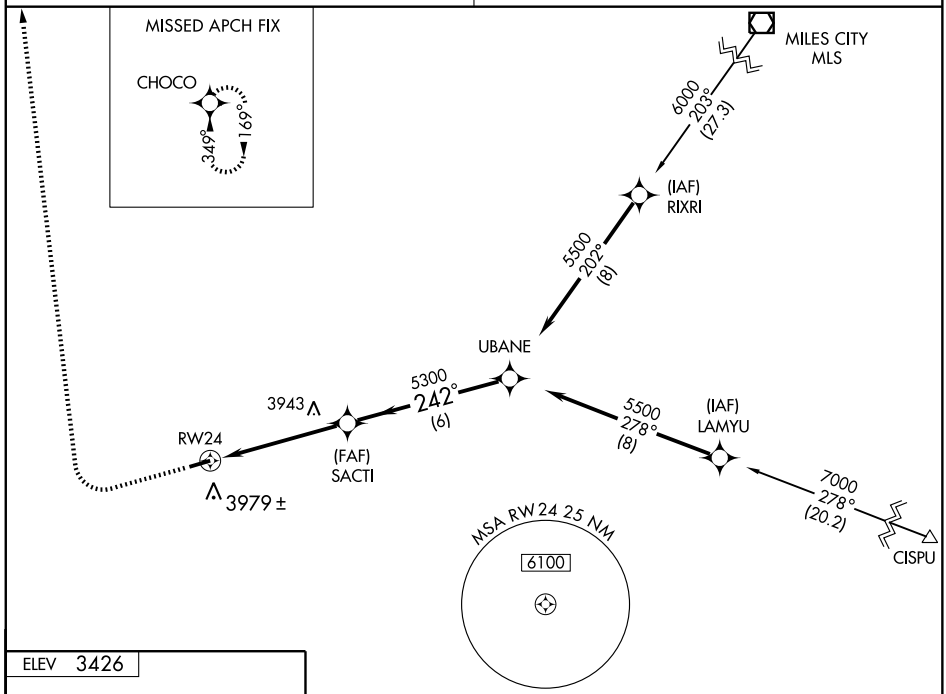
APP CRS	Rwy ldg	5100
242°	TDZE	3411
	Apt Elev	3426

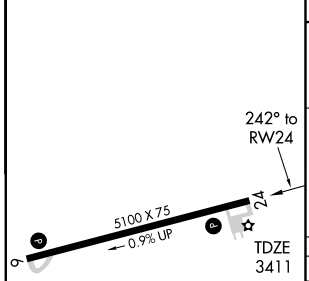
GPS RWY 24
COLSTRIP (M46)

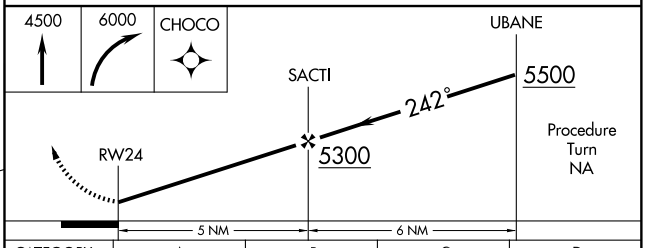
When local altimeter not received use Miles City altimeter setting.

MISSED APPROACH: Climb to 4500 then climbing right turn to 6000 direct CHOCO WP and hold.

SALT LAKE CENTER	CTAF
127.75 351.9	122.9 L







CATEGORY	A	B	C	D
S-24	4200-1 789 (800-1)	4200-1¼ 789 (800-1¼)	4200-2¼ 789 (800-2¼)	NA
CIRCLING	4340-1¼ 914 (1000-1¼)		4340-2¾ 914 (1000-2¾)	NA
MILES CITY ALTIMETER SETTING				
S-24	4440-1¼ 1029 (1100-1¼)	4440-1½ 1029 (1100-1½)	4440-2¾ 1029 (1100-2¾)	NA
CIRCLING	4580-1¼ 1154 (1200-1¼)	4580-1½ 1154 (1200-1½)	4580-3 1154 (1200-3)	NA

MIRL Rwy 6-24 L

NW-1. 08 APR 2010 to 06 MAY 2010

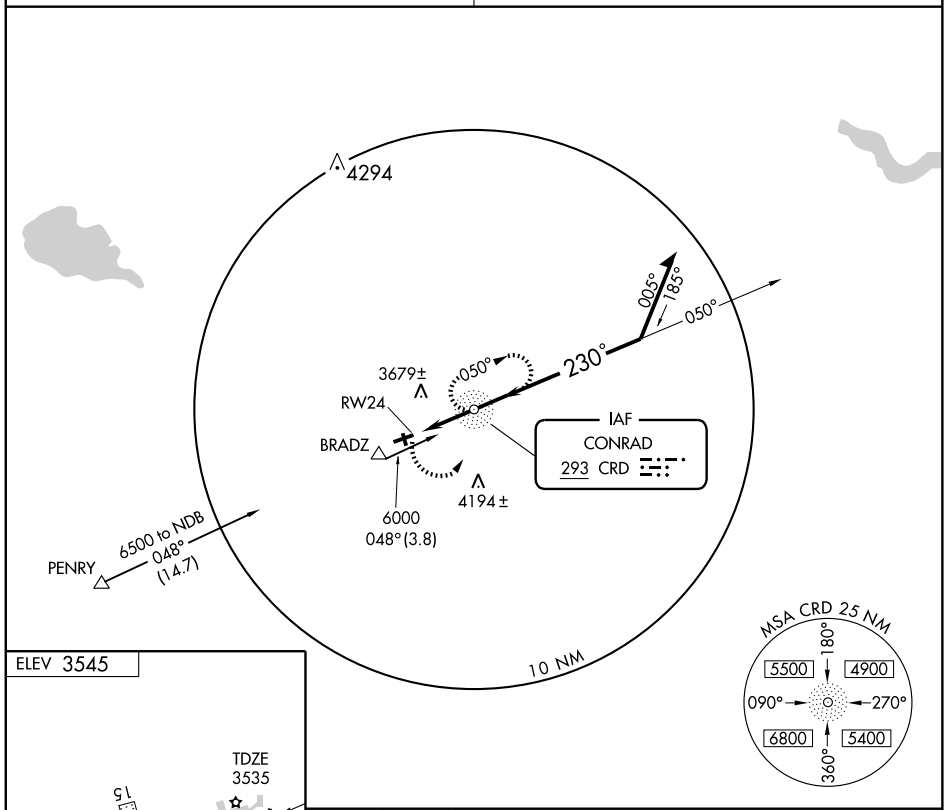
NDB CRD	APP CRS	Rwy ldg	4601
293	230°	TDZE	3535
		Apt Elev	3545

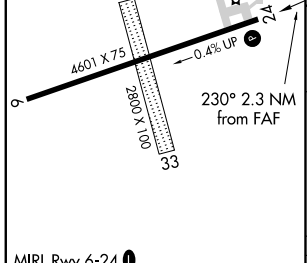
NDB or GPS RWY 24
CONRAD (SØ1)

Use Cut Bank altimeter setting; if not received, procedure not authorized.

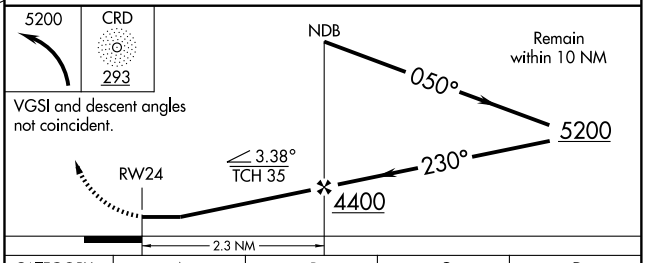
MISSED APPROACH: Climbing left turn to 5200 direct CRD NDB and hold.

SALT LAKE CITY CENTER	UNICOM
133.4 285.4	122.8 (CTAF) L





MIRL Rwy 6-24 L
REIL Rwy 24 L



FAF to MAP 2.3 NM					
Knots	60	90	120	150	180
Min:Sec	2:18	1:32	1:09	0:55	0:46

CATEGORY	A	B	C	D
S-24	4260-1	725 (800-1)	4260-2 725 (800-2)	4260-2¼ 725 (800-2¼)
CIRCLING	4260-1	715 (800-1)	4340-2¼ 795 (800-2¼)	NA

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	5300
315°	TDZE	3847
	Apt Elev	3854

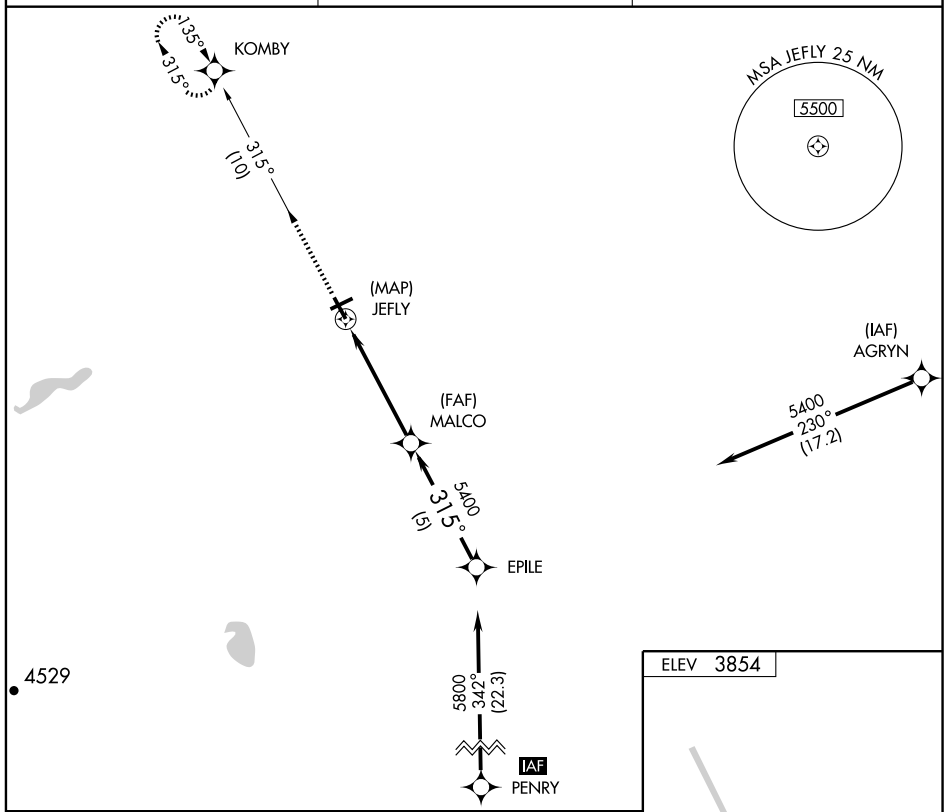
GPS RWY 31
CUT BANK MUNI (CTB)

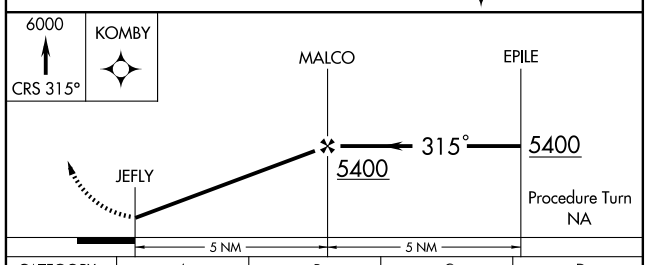
NA

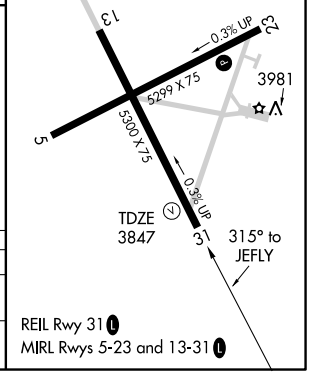
IAF ARM APPROACH MODE PRIOR TO IAF.

MISSED APPROACH: Climb to 6000 via 315° course to KOMBY WP and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
119.025	133.4 285.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-31	4220-1 373 (400-1)			4220-1¼ 373 (400-1¼)
CIRCLING	4220-1 366 (400-1)	4320-1 466 (500-1)	4320-1½ 466 (500-1½)	4420-2 566 (600-2)

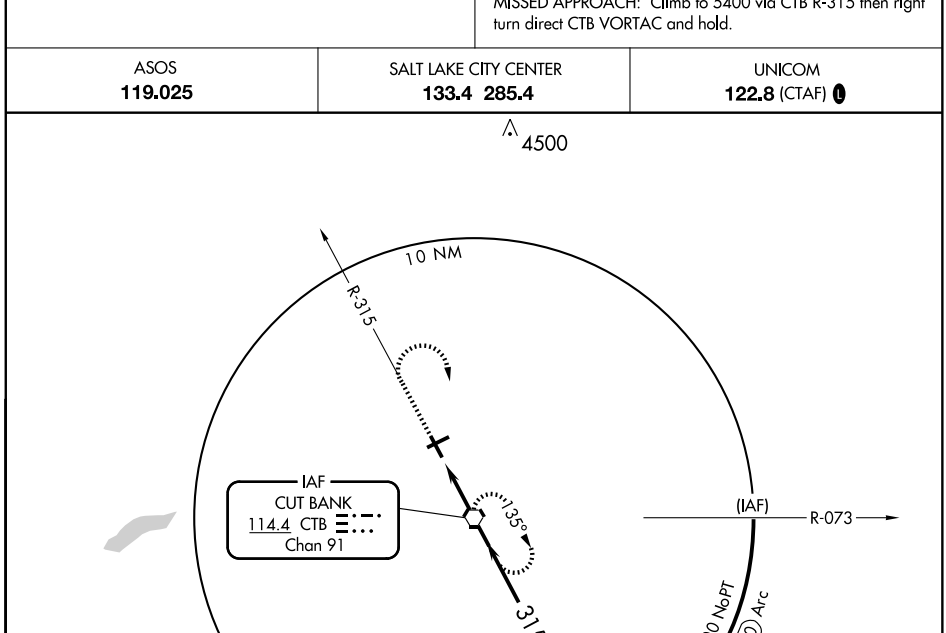
NW-1, 08 APR 2010 to 06 MAY 2010

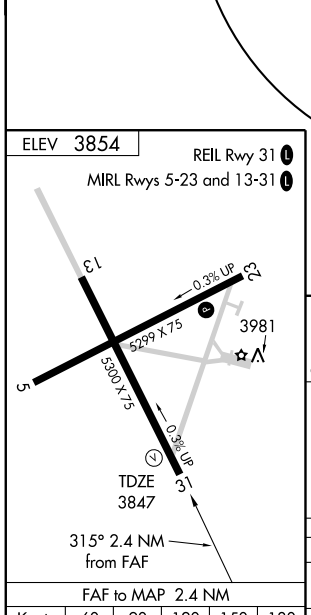
VORTAC CTB 114.4 Chan 91	APP CRS 315°	Rwy ldg 5300 TDZE 3847 Apt Elev 3854

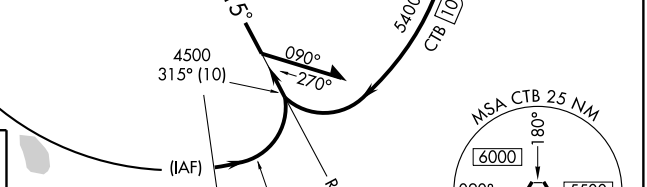
VOR RWY 31
CUT BANK MUNI (CTB)

MISSED APPROACH: Climb to 5400 via CTB R-315 then right turn direct CTB VORTAC and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
119.025	133.4 285.4	122.8 (CTAF) L







FAF to MAP 2.4 NM					
Knots	60	90	120	150	180
Min:Sec	2:24	1:36	1:12	0:58	0:48

CATEGORY	A	B	C	D
S-31	4200-1 353 (400-1)			4200-1¼ 353 (400-1¼)
CIRCLING	4340-1 486 (500-1)		4340-1½ 486 (500-1½)	4420-2 566 (600-2)

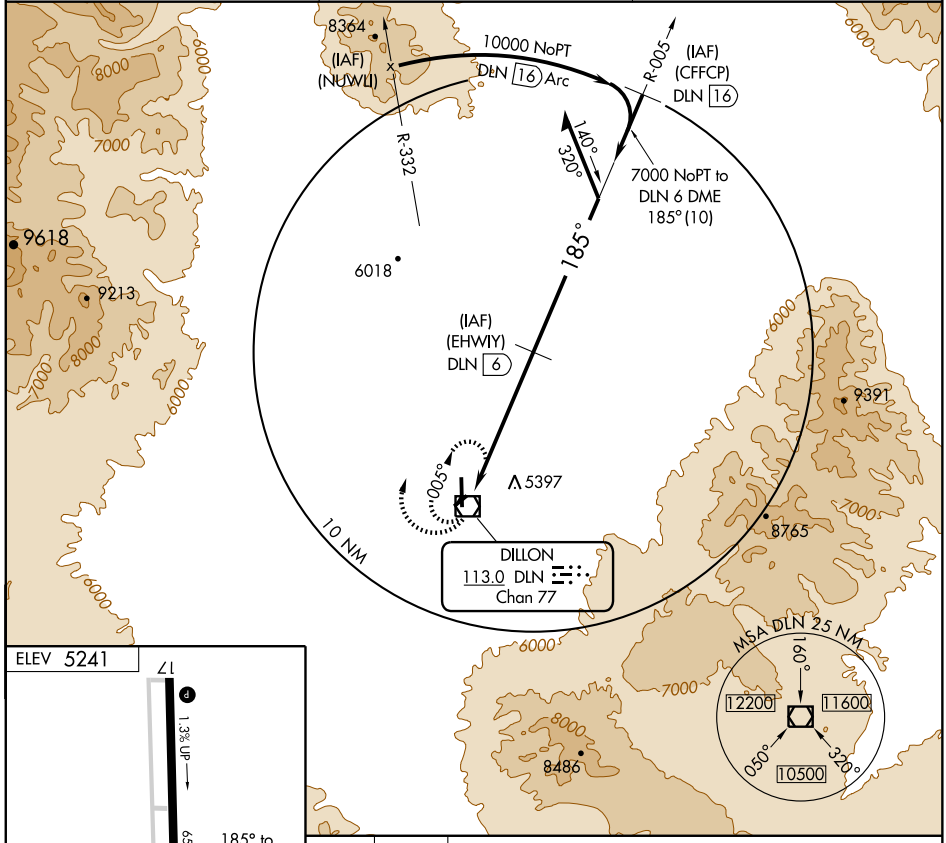
VOR/DME DLN 113.0 Chan 77	APP CRS 185°	Rwy ldg N/A TDZE N/A Apt Elev 5241

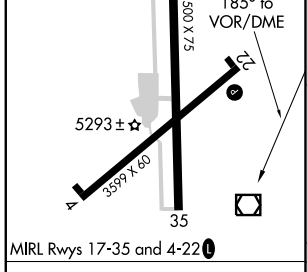
VOR/DME or GPS-B
DILLON (DLN)

Procedure not authorized when Dillon altimeter setting not available.

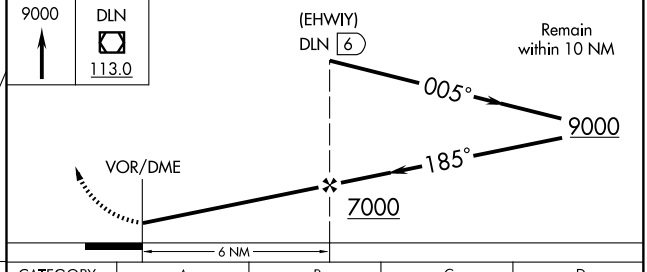
MISSED APPROACH: Climb to 9000 in DLN VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.225	132.4 338.3	122.8 (CTAF) L





MIRL Rwys 17-35 and 4-22 L



Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	5720-1 482 (500-1)	5740-1 502 (600-1)	5760-1½ 522 (600-1½)	5840-2 602 (700-2)

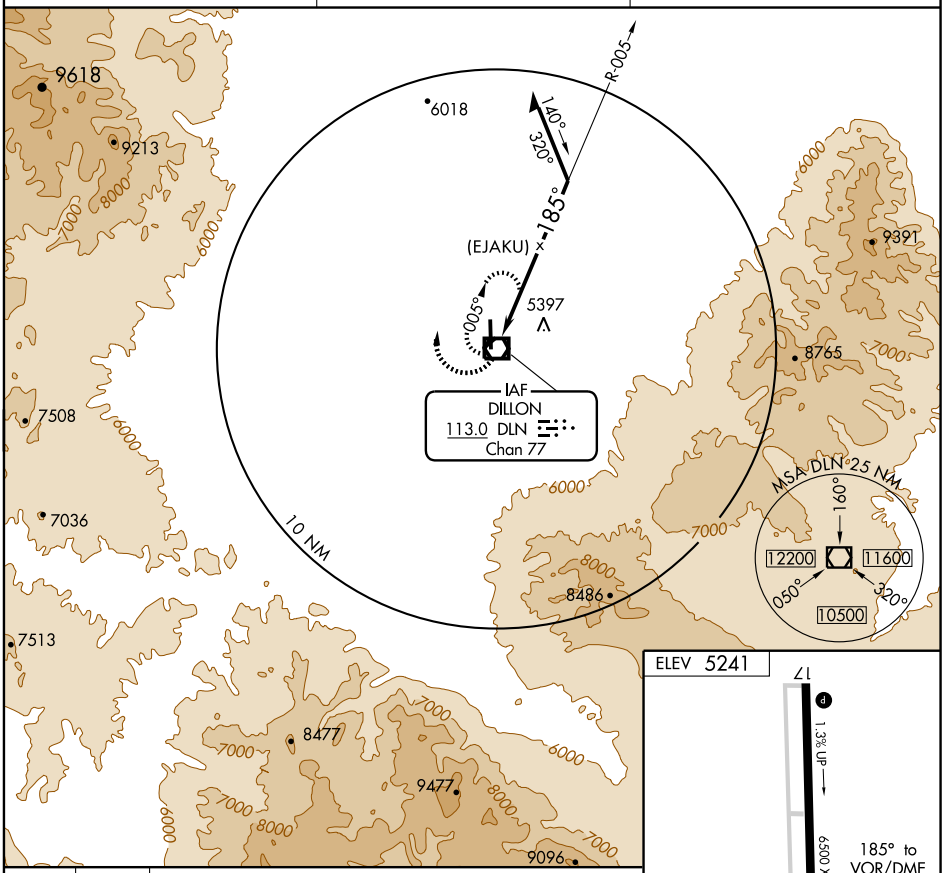
VOR/DME DLN 113.0 Chan 77	APP CRS 185°	Rwy ldg N/A TDZE N/A Apt Elev 5241

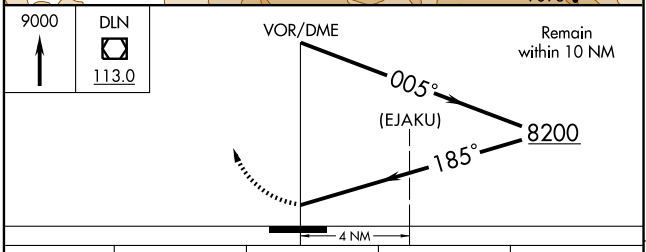
VOR or GPS-A
DILLON (DLN)

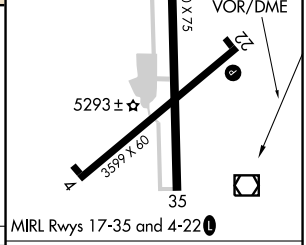
Procedure not authorized when Dillon altimeter setting not available.

MISSED APPROACH: Climb to 9000 in DLN VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.225	132.4 338.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	6700-1¼ 1462 (1500-1¼)	6700-1½ 1462 (1500-1½)	6700-3 1462 (1500-3)	

Knots	60	90	120	150	180
Min:Sec					

NW-1. 08 APR 2010 to 06 MAY 2010

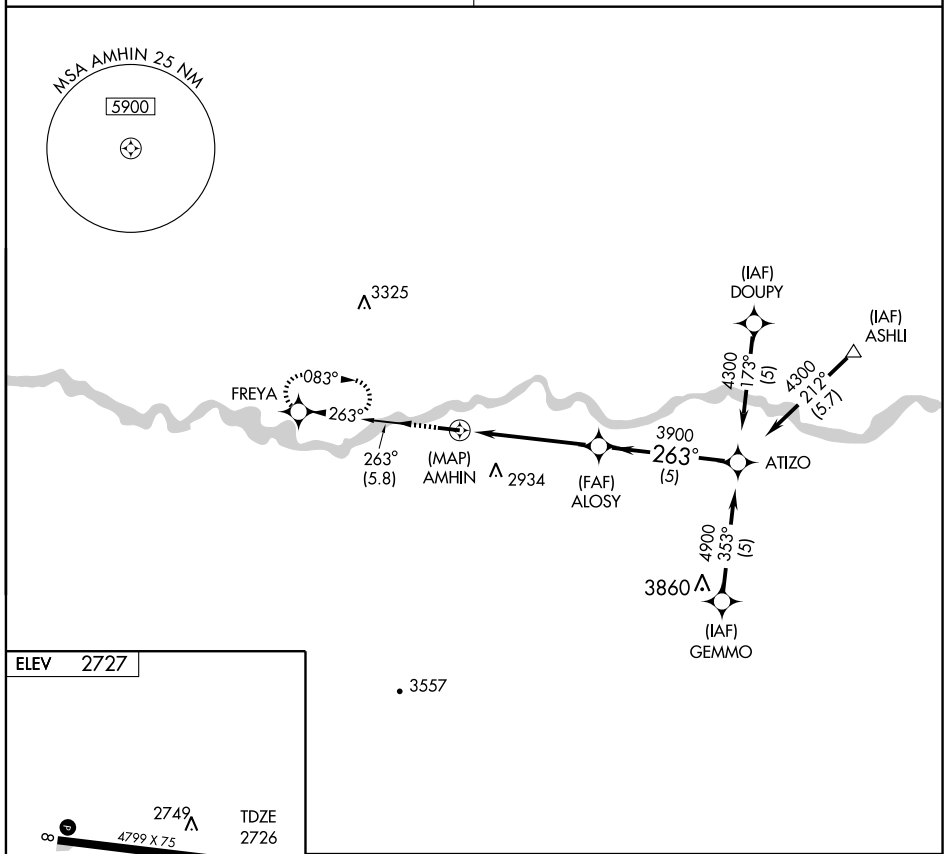
APP CRS	Rwy ldg	4799
263°	TDZE	2726
	Apt Elev	2727

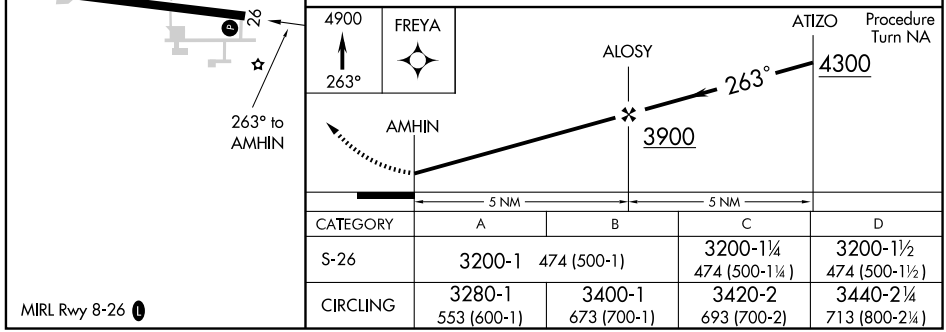
GPS RWY 26
FORSYTH/ TILLITT FIELD (1S3)

NA Use Miles City altimeter setting, when not available, except for operators with approved weather reporting services, procedure not authorized.

MISSED APPROACH: Climb to 4900 via 263° course to FREYA WP and hold.

GREAT FALLS RADIO	UNICOM
122.2 255.4	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-26	3200-1 474 (500-1)		3200-1¼ 474 (500-1¼)	3200-1½ 474 (500-1½)
CIRCLING	3280-1 553 (600-1)	3400-1 673 (700-1)	3420-2 693 (700-2)	3440-2¼ 713 (800-2¼)

MIRL Rwy 8-26 L

NDB FOR	APP CRS	Rwy ldg	4799
236	257°	TDZE	2726
		Apt Elev	2727

NDB RWY 26

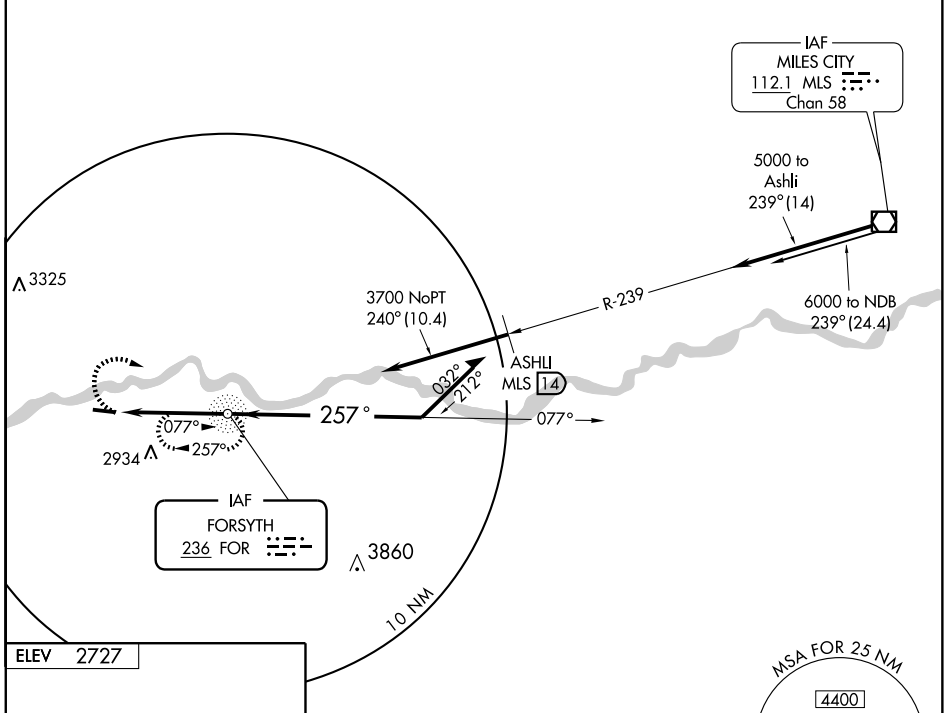
FORSYTH/ TILLITT FIELD (1S3)

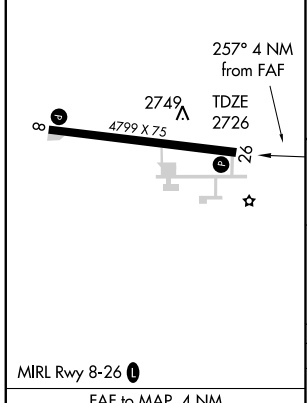
NA

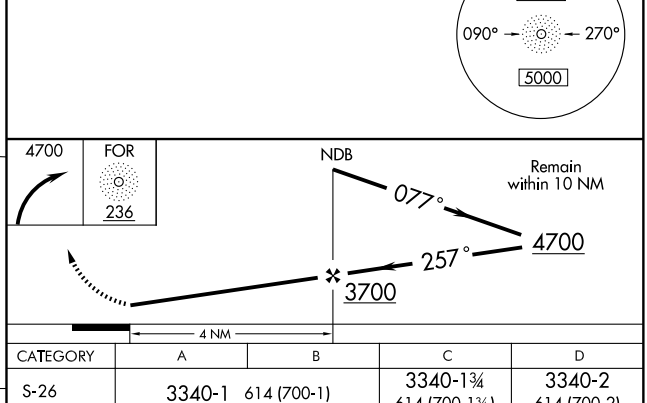
Use Miles City altimeter setting, when not available, except for operators with approved weather reporting services, procedure not authorized.

MISSED APPROACH: Climbing right turn to 4700 direct FOR NDB and hold.

GREAT FALLS RADIO	UNICOM
122.2 255.4	122.8 (CTAF) L







FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

CATEGORY	A	B	C	D
S-26	3340-1 614 (700-1)		3340-1¾ 614 (700-1¾)	3340-2 614 (700-2)
CIRCLING	3340-1 614 (700-1)	3420-1 694 (700-1)	3420-2 694 (700-2)	3440-2¼ 714 (800-2¼)

NW-1. 08 APR 2010 to 06 MAY 2010

FORT BENTON, MONTANA

AL-10260 (FAA)

09295

RNAV (GPS) RWY 23

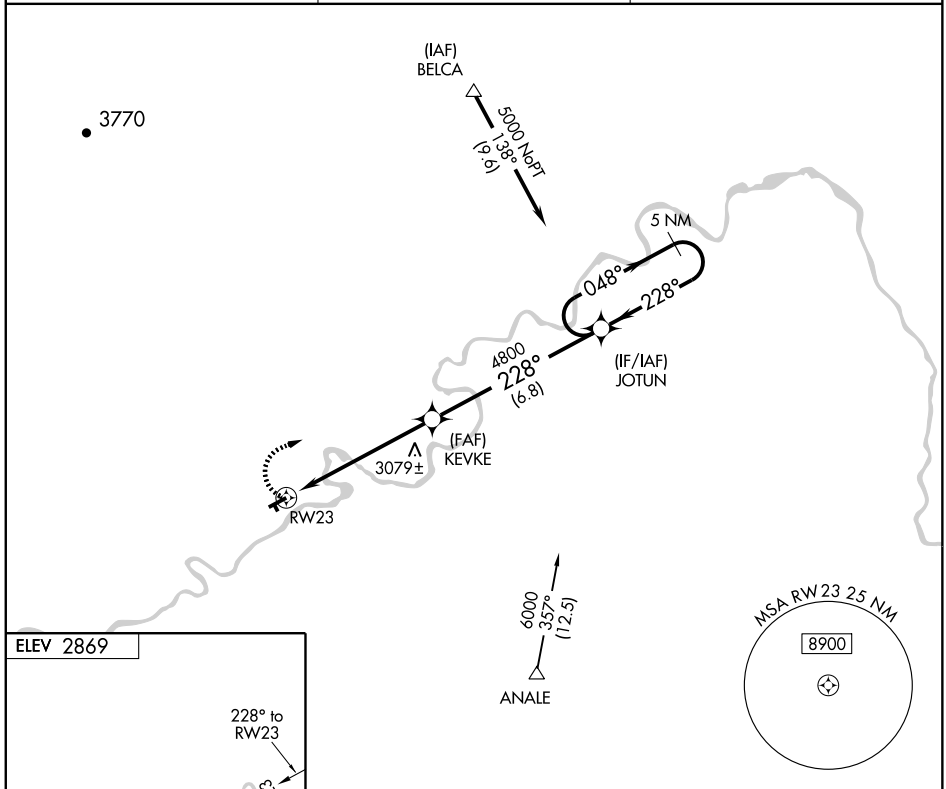
FORT BENTON (79S)

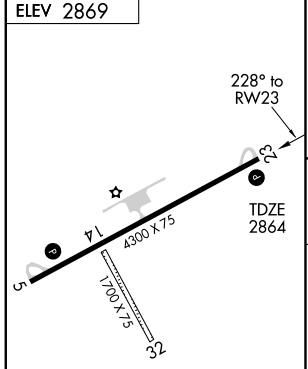
APP CRS	Rwy ldg	4300
228°	TDZE	2864
	Apt Elev	2869

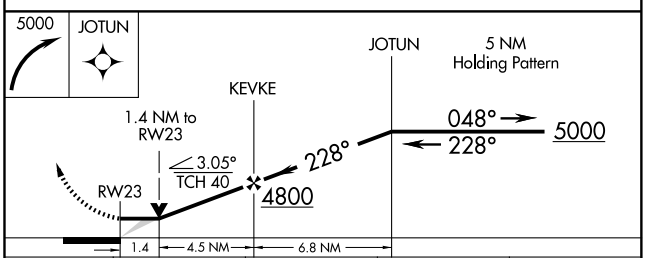
DME/DME RNP-0.3 NA. Procedure NA at night.
When local altimeter setting not received, use Great Falls altimeter setting and increase all MDA 280 feet and all Cat B and C visibilities 1 mile.

MISSED APPROACH: Climbing right turn to 5000 direct JOTUN and hold.

AWOS-A	SALT LAKE CENTER	UNICOM
122.8	133.4 285.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3340-1 476 (500-1)		3340-1¼ 476 (500-1¼)	NA
CIRCLING	3340-1 471 (500-1)		3340-1½ 471 (500-1½)	NA

MIRL Rwy 5-23 L

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	5001
120°	TDZE	2291
	Apt Elev	2294

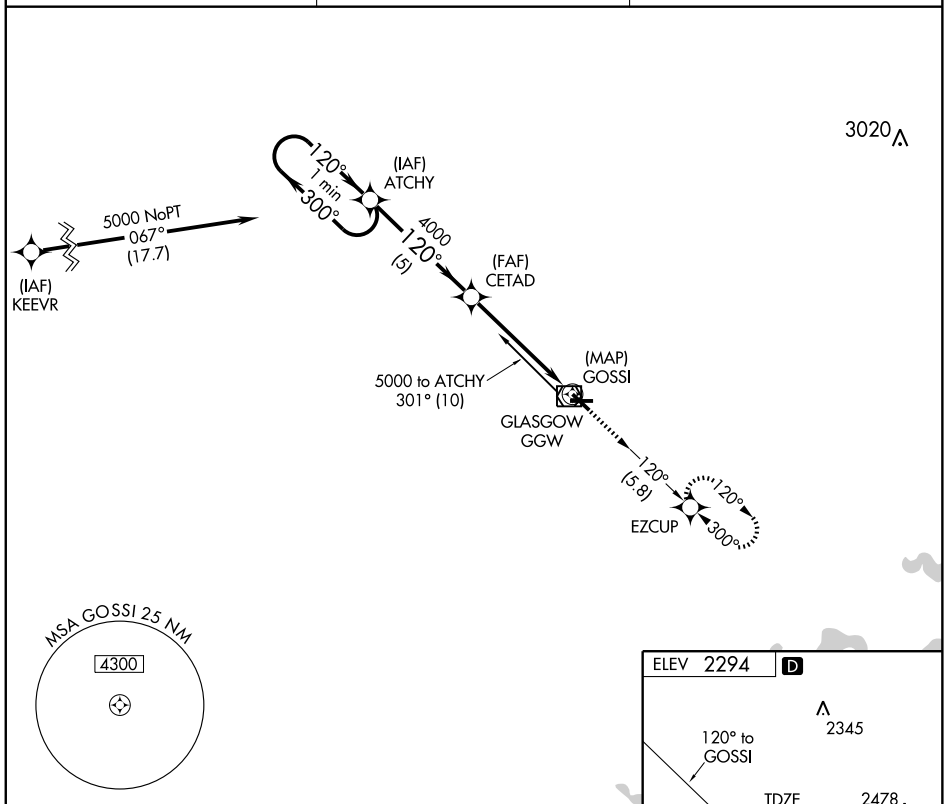
GPS RWY 12

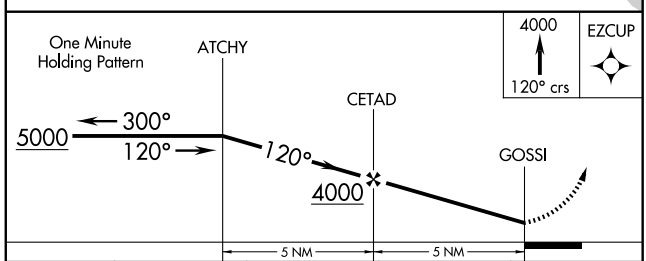
GLASGOW/WOKAL FIELD/GLASGOW INTL (GGW)

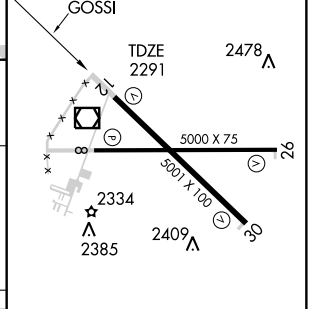
NA

MISSED APPROACH: Climb to 4000 via 120° course to EZCUP WP and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	126.85 305.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-12	2720-1	429 (500-1)	2720-1¼ 429 (500-1¼)	2720-1½ 429 (500-1½)
CIRCLING	2780-1	486 (500-1)	2780-1½ 486 (500-1½)	2860-2 566 (600-2)

REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

NW-1. 08 APR 2010 to 06 MAY 2010

NDB MKR	APP CRS	Rwy ldg / TDZE / Apt Elev
339	272°	5001 / 2291 / 2294

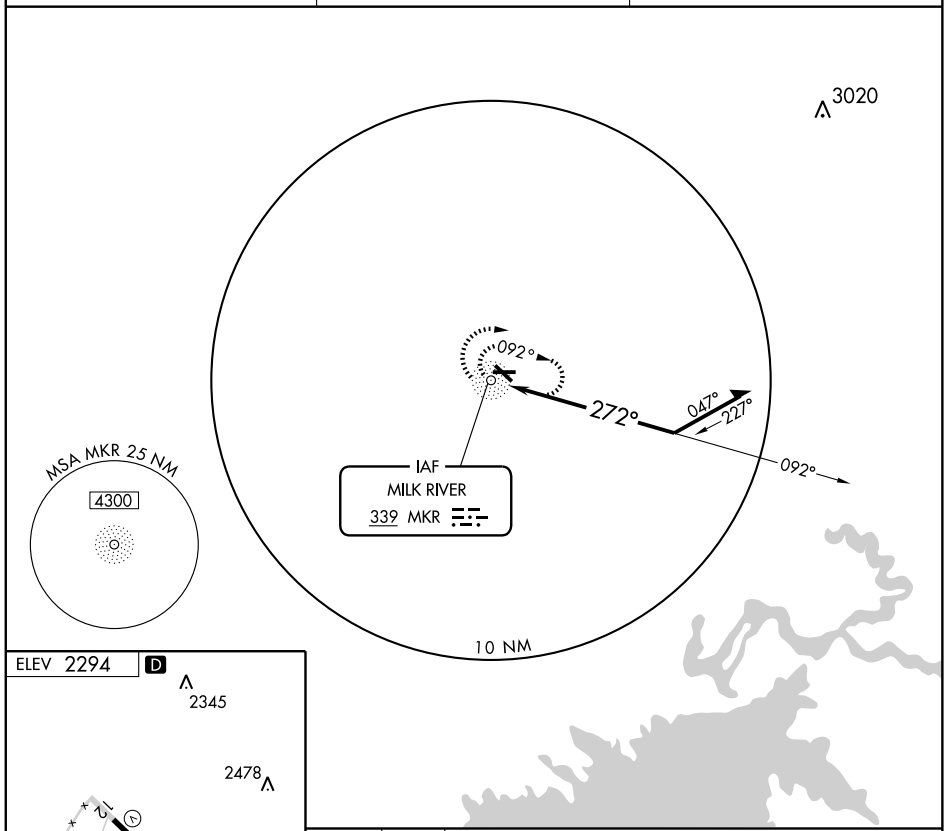
NDB RWY 30

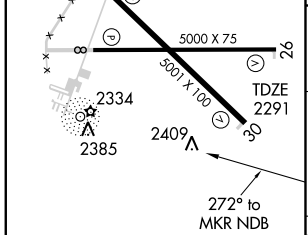
GLASGOW/WOKAL FIELD/GLASGOW INTL (GGW)

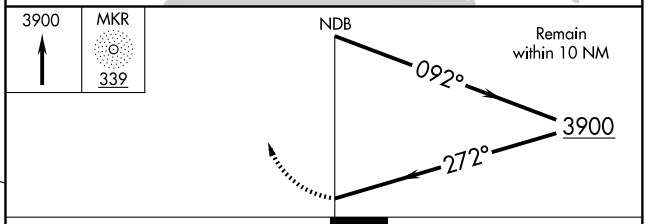
ACTIVATE MIRL Rwys 8-26 and 12-30-CTAF.

MISSED APPROACH: Climb to 3900 in MKR NDB holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.175	126.85 305.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-30	2840-1	549 (600-1)	2840-1½ 549 (600-1½)	2840-1¾ 549 (600-1¾)
CIRCLING	2840-1	547 (600-1)	2840-1½ 547 (600-1½)	2860-2 567 (600-2)

REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

NW-1. 08 APR 2010 to 06 MAY 2010

VOR/DME GGW	APP CRS	Rwy ldg	5001
113.9	293°	TDZE	2291
Chan 86		Apt Elev	2294

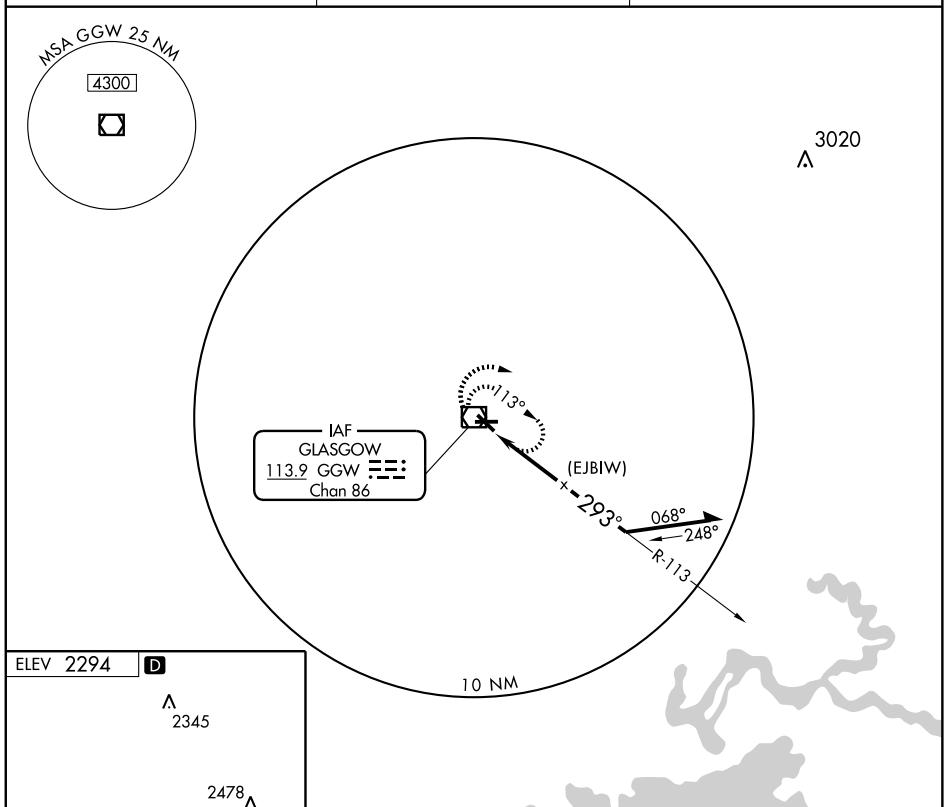
VOR or GPS RWY 30

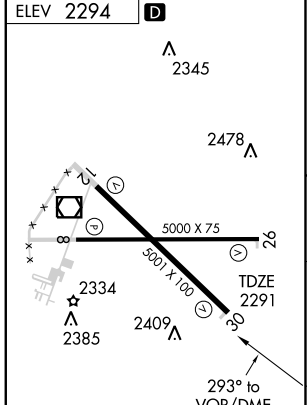
GLASGOW/WOKAL FIELD/GLASGOW INTL (GGW)

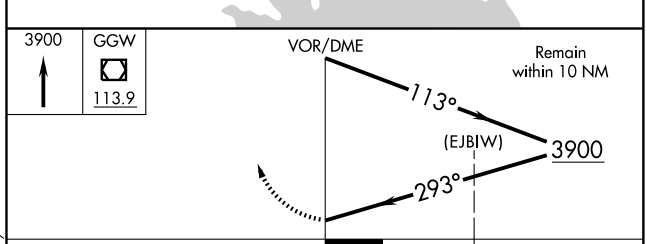
ACTIVATE MIRL Rwys 8-26 and 12-30-CTAF.

MISSED APPROACH: Climb to 3900 in GGW VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.175	126.85 305.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-30	2780-1	489 (500-1)	2780-1¼ 489 (500-1¼)	2780-1½ 489 (500-1½)
CIRCLING	2780-1	487 (500-1)	2780-1½ 487 (500-1½)	2860-2 567 (600-2)

REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

NW-1, 08 APR 2010 to 06 MAY 2010

VOR/DME GGW 113.9 Chan 86	APP CRS 133°	Rwy ldg 5001 TDZE 2291 Apt Elev 2294

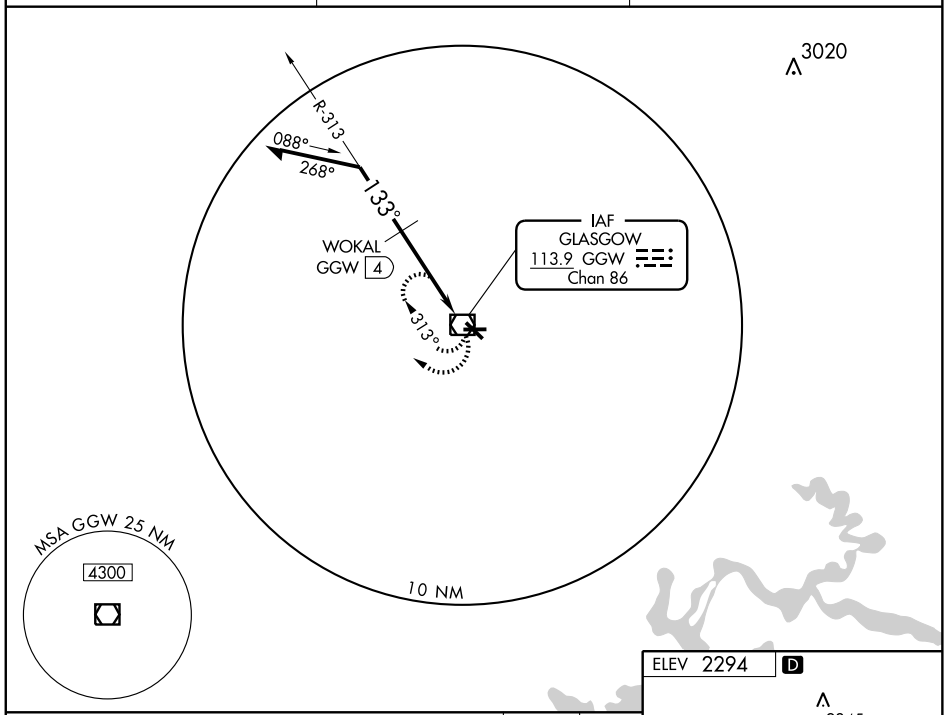
VOR RWY 12

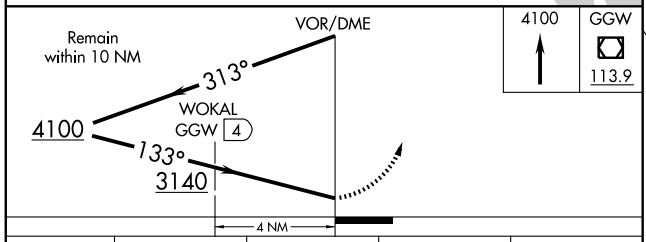
GLASGOW/WOKAL FIELD/GLASGOW INTL (GGW)

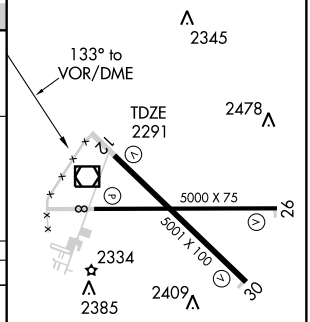
ACTIVATE MIRL Rwys 8-26 and 12-30-CTAF.

MISSED APPROACH: Climb to 4100 in GGW VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.175	126.85 305.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-12	3140-1 849 (900-1)	3140-1¼ 849 (900-1¼)	3140-2½ 849 (900-2½)	3140-2¾ 849 (900-2¾)
CIRCLING	3140-1 847 (900-1)	3140-1¼ 847 (900-1¼)	3140-2½ 847 (900-2½)	3140-2¾ 847 (900-2¾)
VOR/DME MINIMUMS				
S-12	2700-1 409 (500-1)		2700-1¼ 409 (500-1¼)	
CIRCLING	2780-1 487 (500-1)		2780-1½ 487 (500-1½)	2860-2 567 (600-2)

REIL Rwys 8, 12, 26 and 30 L

MIRL Rwys 8-26 and 12-30 L

NW-1. 08 APR 2010 to 06 MAY 2010

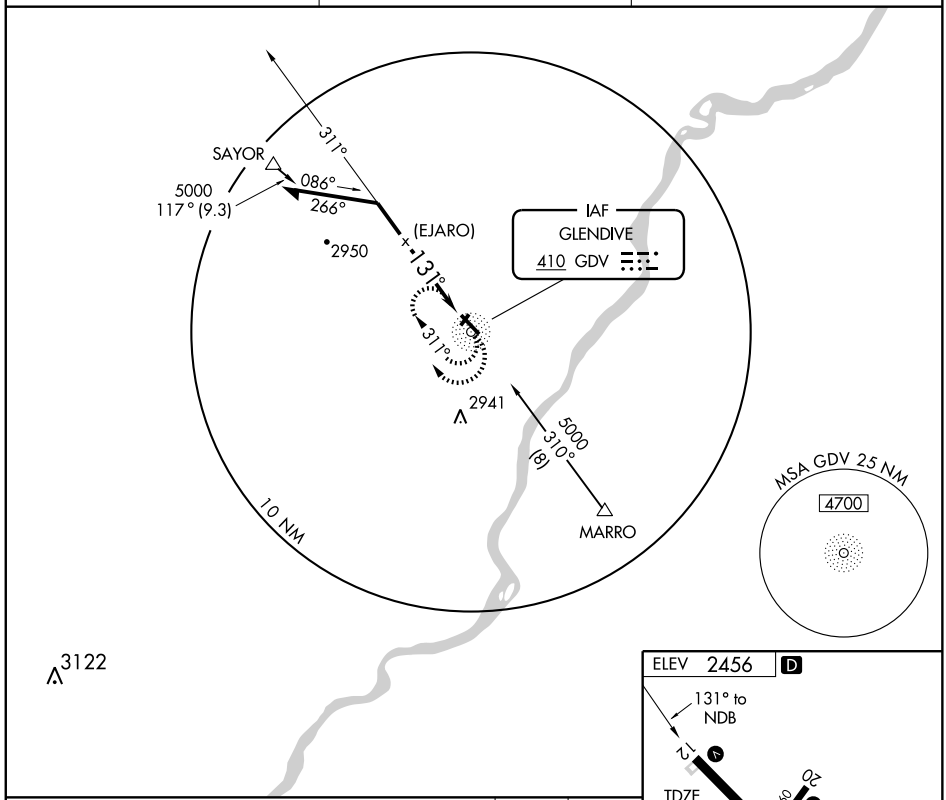
NDB GDV 410	APP CRS 131°	Rwy ldg 5704 TDZE 2456 Apt Elev 2456

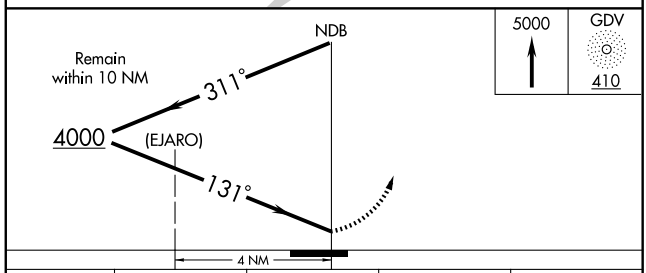
NDB or GPS RWY 12

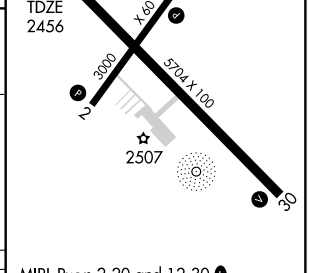
GLENDIVE/ DAWSON COMMUNITY (GDV)

MISSED APPROACH: Climb to 5000 in GDV NDB holding pattern.

AWOS-3	GREAT FALLS RADIO	UNICOM
135.075	122.55	122.8 (CTAF) L







MIRL Rwys 2-20 and 12-30 L
REIL Rwys 12 and 30

CATEGORY	A	B	C	D
S-12	3300-1 844 (900-1)	3300-1¼ 844 (900-1¼)	3300-2½ 844 (900-2½)	3300-2¾ 844 (900-2¾)
CIRCLING	3300-1 844 (900-1)	3300-1¼ 844 (900-1¼)	3300-2½ 844 (900-2½)	3300-2¾ 844 (900-2¾)

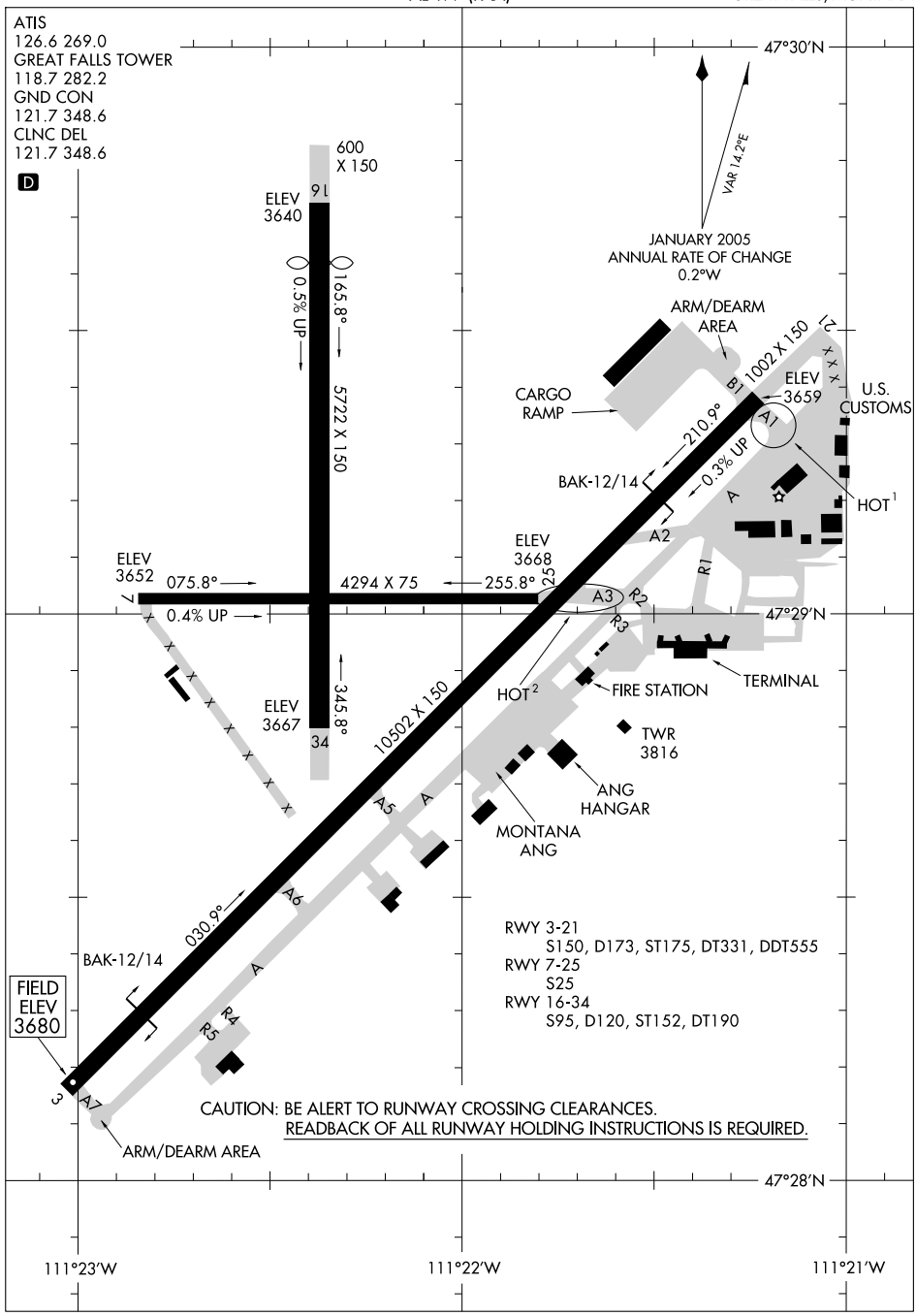
Knots	60	90	120	150	180
Min:Sec					

NW-1, 08 APR 2010 to 06 MAY 2010

AIRPORT DIAGRAM

AL-177 (FAA)

GREAT FALLS INTL (GTF)
GREAT FALLS, MONTANA



APP CRS	Rwy ldg	10502
209°	TDZE	3669
	Apt Elev	3680

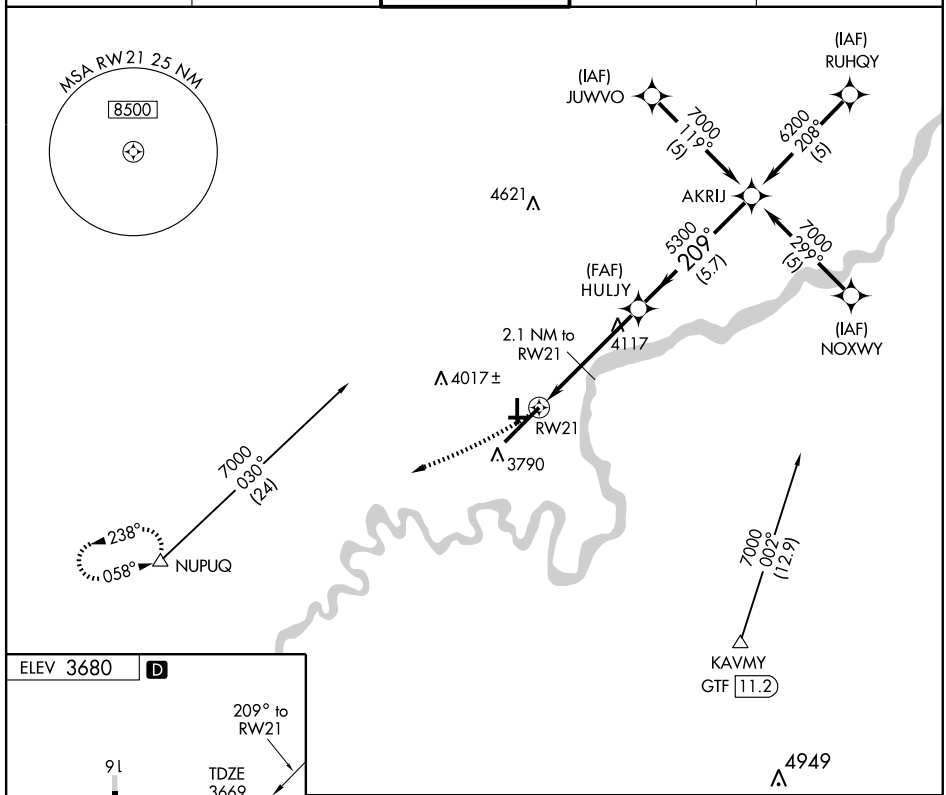
GPS RWY 21

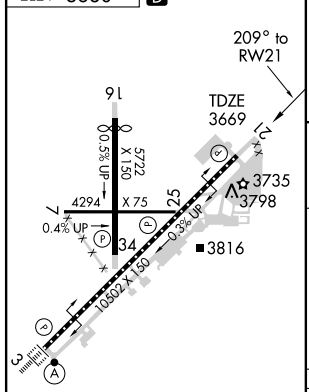
GREAT FALLS INTL (GTF)

NA

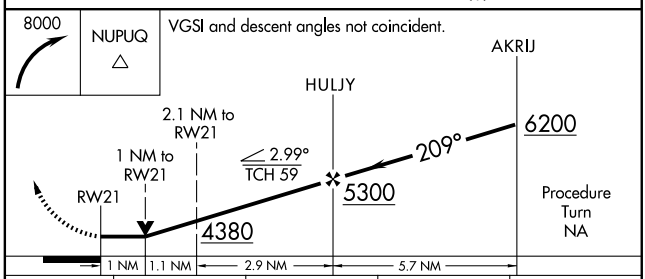
MISSED APPROACH: Climbing right turn to 8000 direct NUPUQ WP and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6





TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 7-25
HIRL Rwy 3-21 and 16-34



CATEGORY	A	B	C	D
S-21	4040-1 371 (400-1)			4040-1¼ 371 (400-1¼)
CIRCLING	4120-1 440 (500-1)	4140-1 460 (500-1)	4140-1½ 460 (500-1½)	4240-2 560 (600-2)

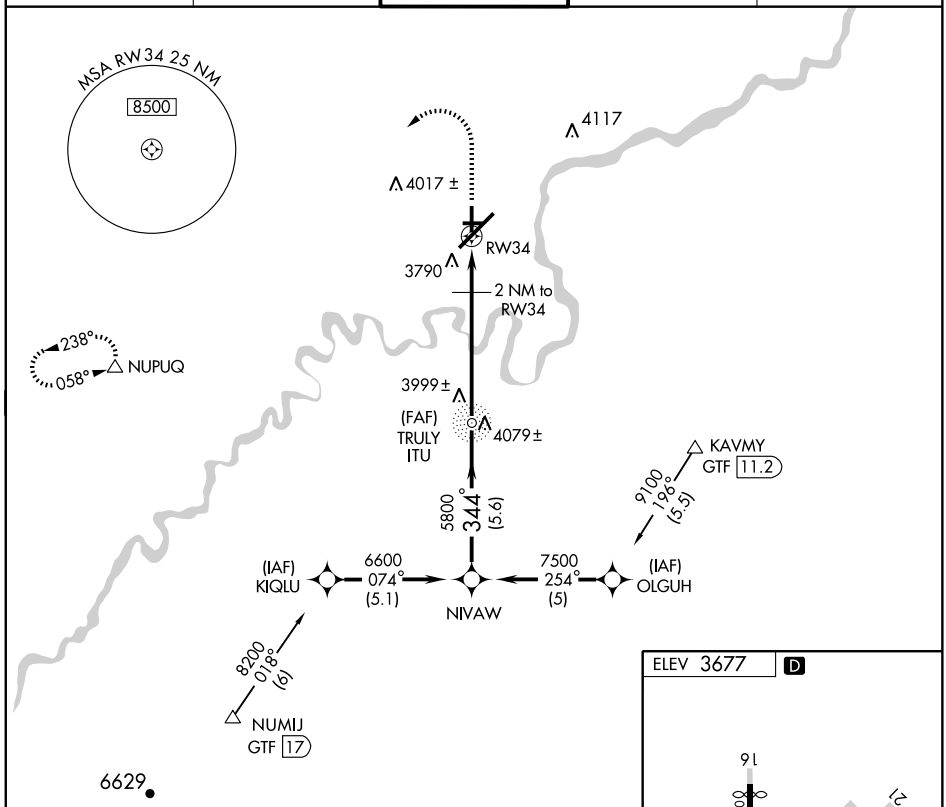
APP CRS	Rwy ldg	5070
344°	TDZE	3669
	Apt Elev	3677

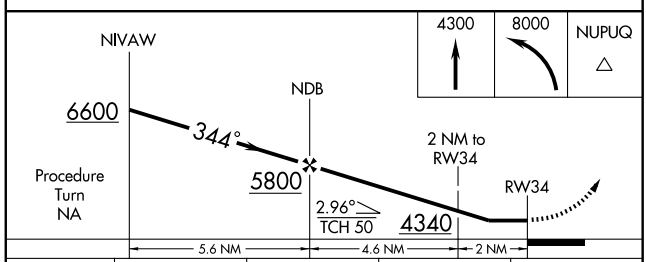
GPS RWY 34
GREAT FALLS INTL (GTF)

NA

MISSED APPROACH: Climb to 4300, then climbing left turn to 8000 direct NUPUQ WP and hold.

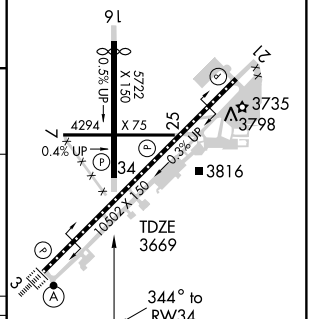
ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6





CATEGORY	A	B	C	D
S-34	4100-1 431 (500-1)		4100-1¼ 431 (500-1¼)	4100-1½ 431 (500-1½)
CIRCLING	4120-1 443 (500-1)	4140-1 463 (500-1)	4140-1½ 463 (500-1½)	4240-2 563 (600-2)

ELEV 3677 D



TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 7-25
HIRL Rwy 3-21 and 16-34

NW-1, 08 APR 2010 to 06 MAY 2010

HI-ILS or LOC/DME RWY 3

LOC I-SMR	APCH CRS	Rwy ldg / TDZE / Arpt Elev
111.3	029°	10,502 / 3680 / 3680

JAL 177 [USAF]

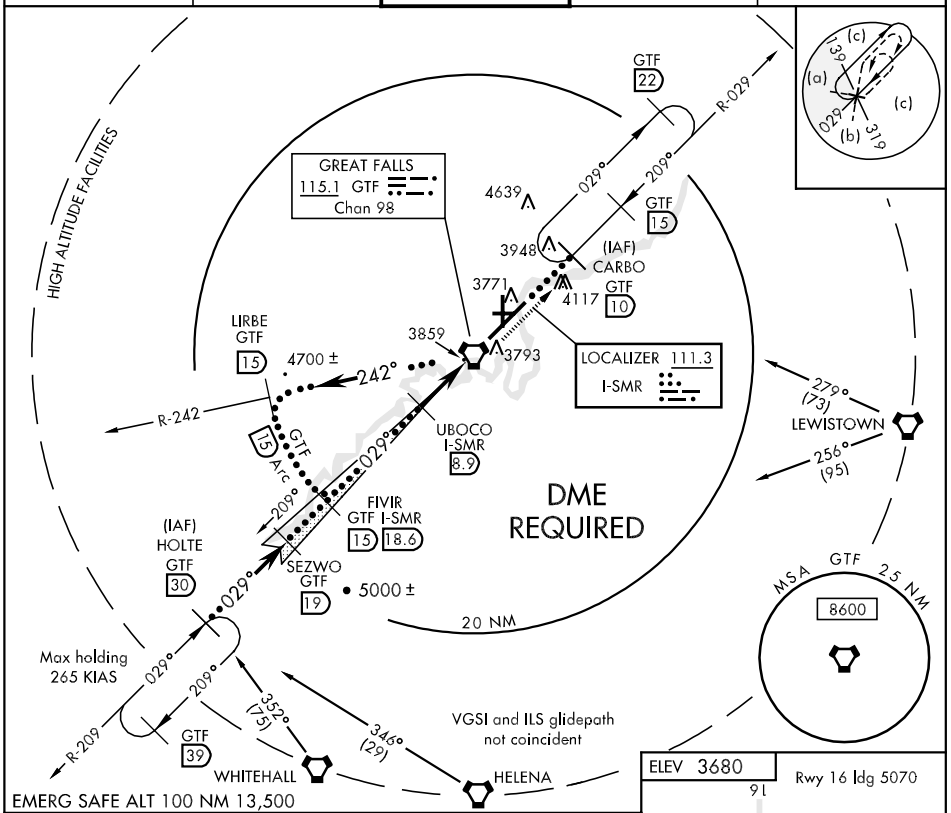
GREAT FALLS INTL (KGTF)

** When ALS inop, increase CAT C RVR to 50 and vis to 1 mile.

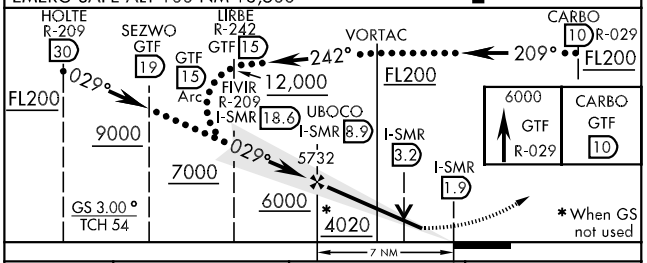
ALSF-2

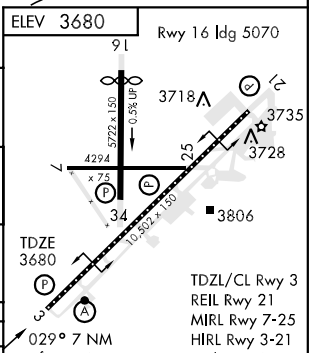
MISSED APPROACH: Climb to 6000 via GTF R-029 to CARBO 10 DME and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



EMERG SAFE ALT 100 NM 13,500





CATEGORY	C	D	E
S-ILS 3	3880/24	200	(200-½)
S-LOC 3 **	4160/40 480 (500-¾)	4160/50 480 (500-1)	4160/60 480 (500-1¼)
CIRCLING	4160-1½ 480 (500-1½)	4240-2 560 (600-2)	4420-2½ 740 (800-2½)

FAF to MAP 7 NM					
Knots	120	140	160	180	200
Min:Sec	3:30	3:00	2:38	2:20	2:06

HI-VOR/DME or TACAN RWY 3

VORTAC GTF 115.1 Chan 98	APCH CRS 029°	Rwy ldg 10,502 TDZE 3674 Arpt Elev 3680

JAL 177 [USAF]

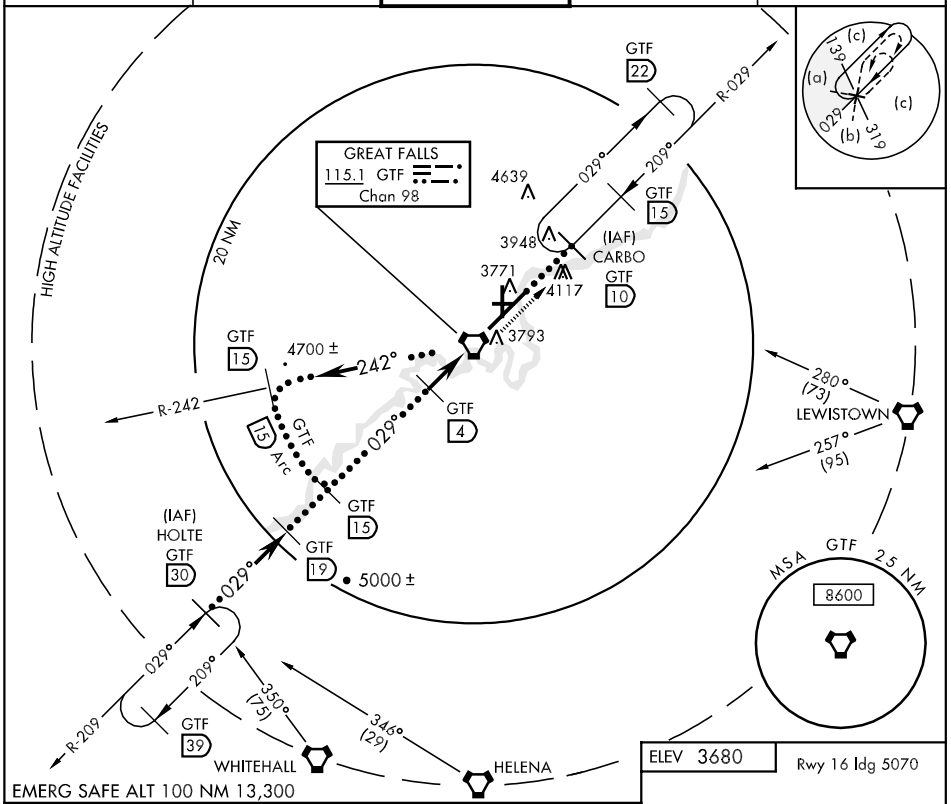
GREAT FALLS INTL (KGTF)

* When ALS inop, increase CAT DE RVR to 60 and vis to 1¼ miles.

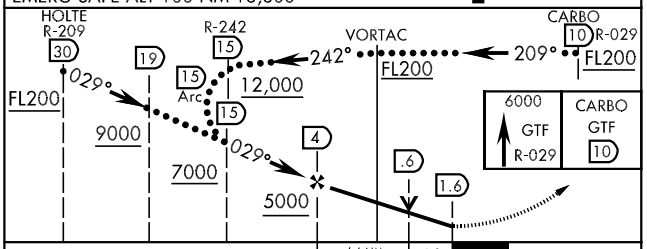
ALSF-2

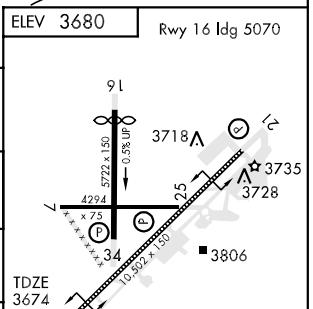
MISSED APPROACH: Climb to 6000 via GTF R-029 to CARBO 10 DME and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



EMERG SAFE ALT 100 NM 13,300





CATEGORY	C	D	E
S-3 *	4060/24 386 (400-½)	4060/50 386 (400-1)	
CIRCLING	4140-1½ 466 (500-1½)	4240-2 566 (600-2)	4420-2¾ 746 (800-2¾)

HI-VOR/DME or TACAN RWY 21

VORTAC GTF 115.1 Chan 98	APCH CRS 209°	Rwy ldg 10,502 TDZE 3665 Arpt Elev 3680

JAL-177 [USAF]

GREAT FALLS INTL (KGTF)

MISSED APPROACH: Climbing right turn to 6000 heading 350°, intercept GTF 12 DME Arc to ABORN 12 DME and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6

HIGH ALTITUDE FACILITIES

20 NM

GTF 39

R-029

029°

209°

(IAF) BETON GTF 30

296° (69)

LEWISTOWN

GTF 12 Arc

4639

3948

4117

3771

ABORN GTF 12

TRIGG GTF 7

4700 ±

GREAT FALLS 115.1 GTF Chan 98

5000 ±

MSA GTF 25 NM 8600

015° (84)

HELENA

EMERG SAFE ALT 100 NM 13,300

6000 Hdg 350°

GTF 12 Arc

ABORN GTF R-029 12

BETON R-029 30

FL200

ABORN 12

TRIGG 7

VORTAC

3.4

4.3

4800

5400

3.6 NM

ELEV 3680

Rwy 16 ldg 5070

209° to VORTAC

9L

3722 x 150

0.5% UP

3718

3735

3728

4294 x 75

3806

TDZE 3674

10,502 x 150

TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 7-25
HIRL Rwy 3-21 and 16-34

CATEGORY	C	D	E
S-21	4000-1 335 (400-1)		4000-1¼ 335 (400-1 ¼)
CIRCLING	4140-1½ 466 (500-1½)	4240-2 566 (600-2)	4420-2¾ 746 (800-2¾)

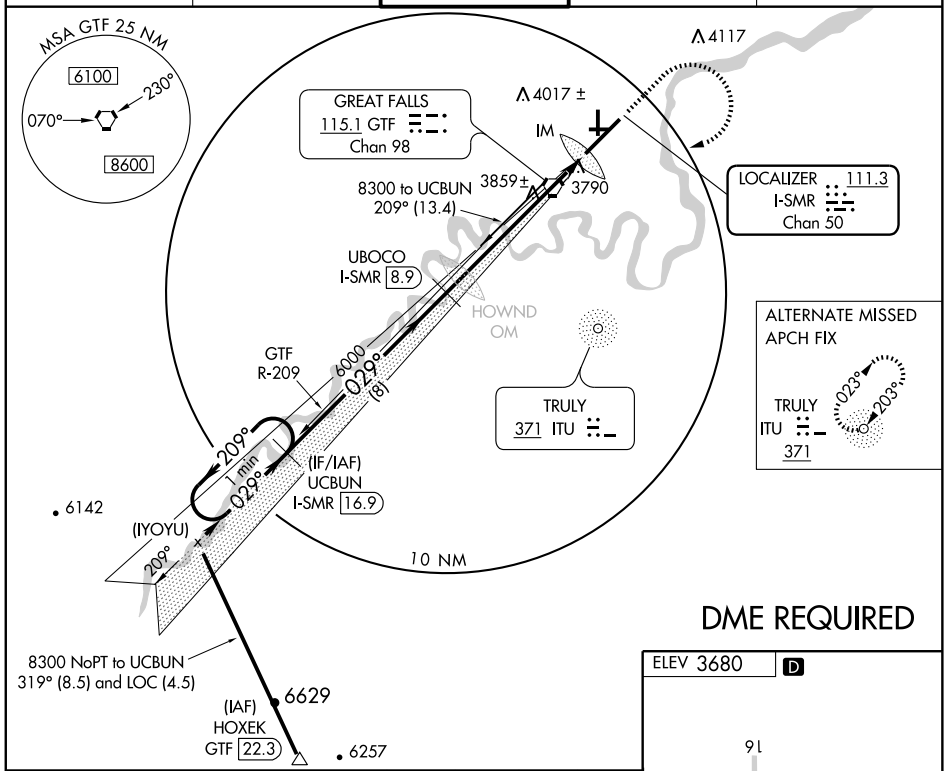
ILS or LOC/DME RWY 3
GREAT FALLS INTL (GTF)

LOC/DME I-SMR	APP CRS	Rwy ldg	10502
111.3	029°	TDZE	3680
Chan 50		Apt Elev	3680

ALSF-2

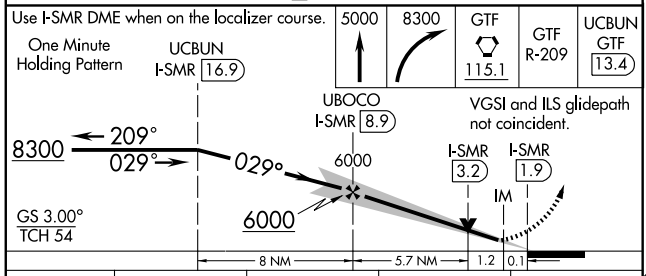
MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then via GTF VORTAC R-209 to UCBUN/GTF VORTAC 13.4 DME and hold.

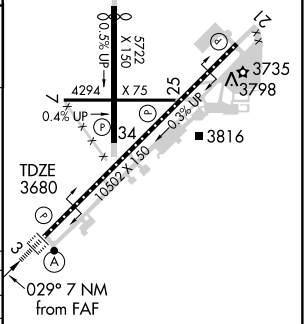
ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



Use I-SMR DME when on the localizer course.

5000	8300	GTF 115.1	GTF R-209	UCBUN GTF 13.4





CATEGORY	A	B	C	D
S-ILS 3	3880/18 200 (200-½)			
S- LOC 3	4160/24 480 (500-½)		4160/40 480 (500-¾)	4160/50 480 (500-1)
CIRCLING	4160-1 480 (500-1)		4160-1½ 480 (500-1½)	4240-2 560 (600-2)

TDZ/CL Rwy 3
MIRL Rwy 7-25
REIL Rwy 21
HIRL Rwys 3-21 and 16-34

NW-1, 08 APR 2010 to 06 MAY 2010

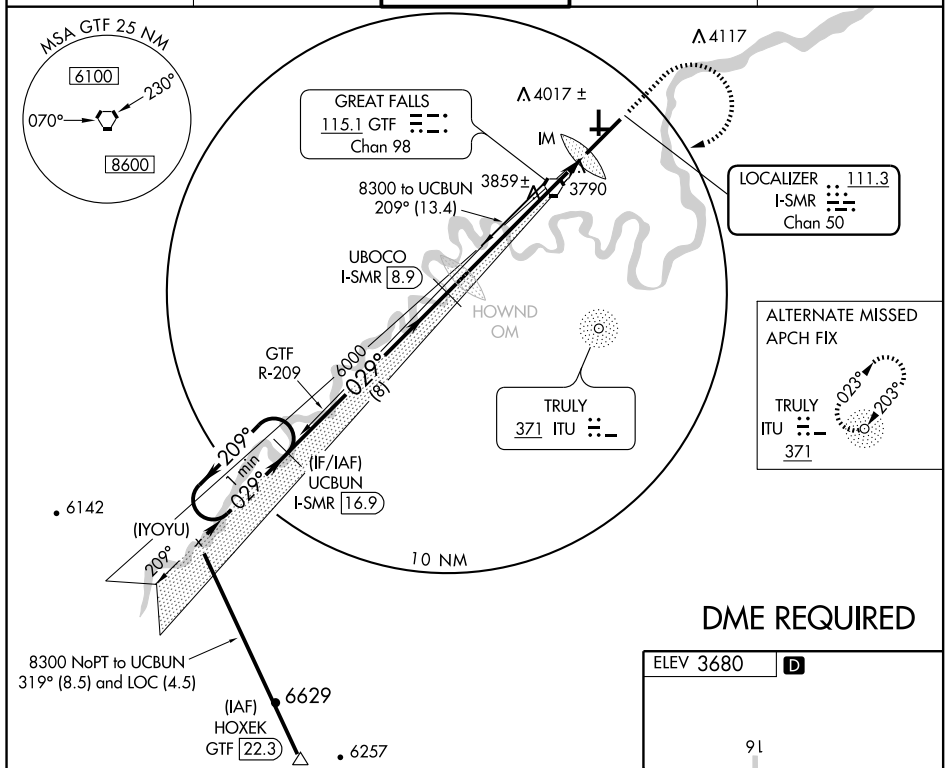
LOC/DME I-SMR	APP CRS	Rwy ldg	10502
111.3	029°	TDZE	3680
Chan 50		Apt Elev	3680

ILS RWY 3 (CAT II)
GREAT FALLS INTL (GTF)

ALSF-2

MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then via GTF VORTAC R-209 to UCBUN/GTF VORTAC 13.4 DME and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



Use I-SMR DME when on the localizer course.

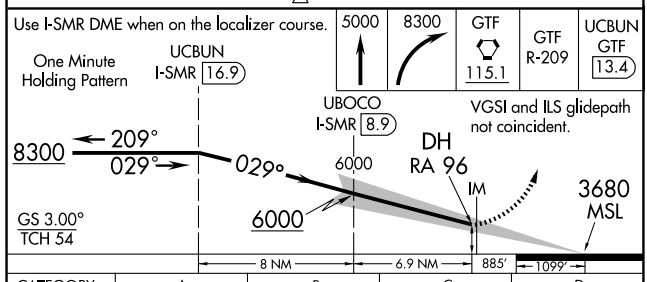
One Minute Holding Pattern

UCBUN I-SMR 16.9

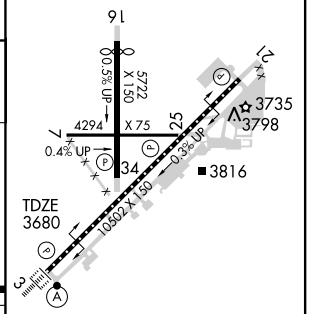
5000	8300	GTF 115.1	GTF R-209	UCBUN GTF 13.4

UBOCO I-SMR 8.9

VGSI and ILS glidepath not coincident.



ELEV 3680 D



CATEGORY	A	B	C	D
S-ILS 3	RA 96/12 100 DA 3780			

TDZ/CL Rwy 3
MIRL Rwy 7-25
REIL Rwy 21
HIRL Rwys 3-21 and 16-34

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

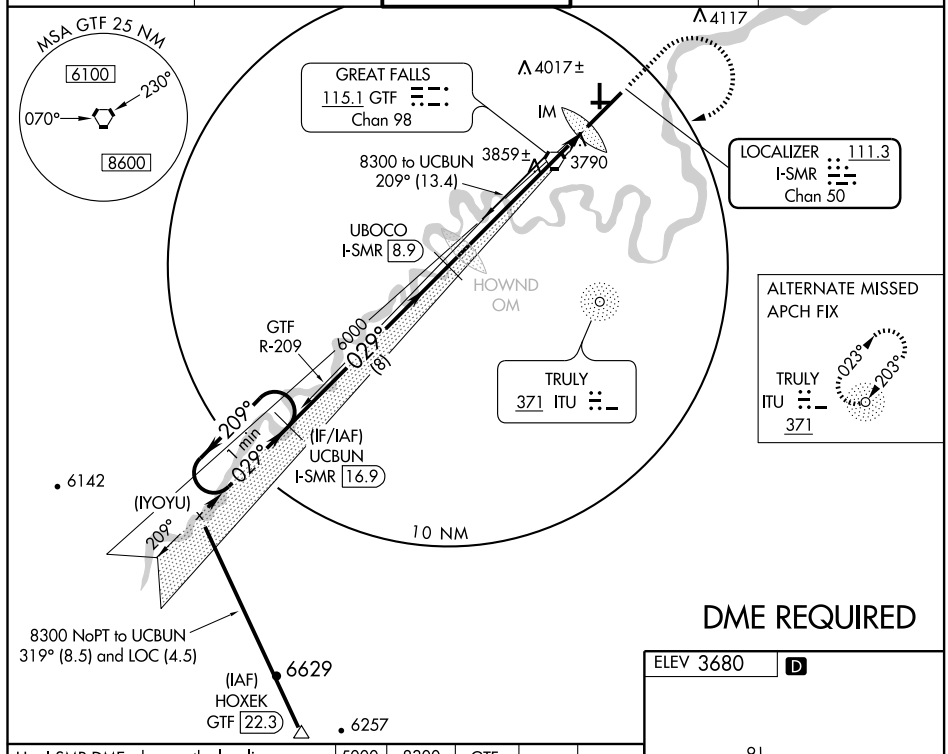
LOC/DME I-SMR 111.3 Chan 50	APP CRS 029°	Rwy ldg 10502 TDZE 3680 Apt Elev 3680

ILS RWY 3 (CAT III)
GREAT FALLS INTL (GTF)

ALSF-2

MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then via GTF VORTAC R-209 to UCBUN/GTF VORTAC 13.4 DME and hold.

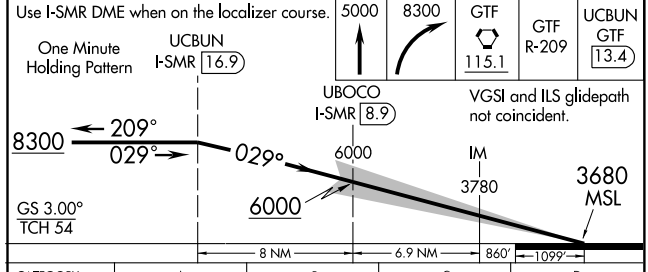
ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



DME REQUIRED

Use I-SMR DME when on the localizer course.

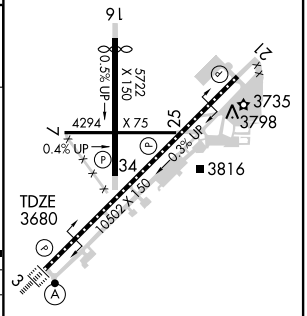
5000	8300	GTF 115.1	GTF R-209	UCBUN GTF 13.4



CATEGORY	A	B	C	D
S-ILS 3		CAT IIIa	RVR 07	
S-ILS 3		CAT IIIb	RVR 06	
S-ILS 3		CAT IIIc	NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ELEV 3680 D



TDZ/CL Rwy 3
MIRL Rwy 7-25
REIL Rwy 21
HIRL Rwys 3-21 and 16-34

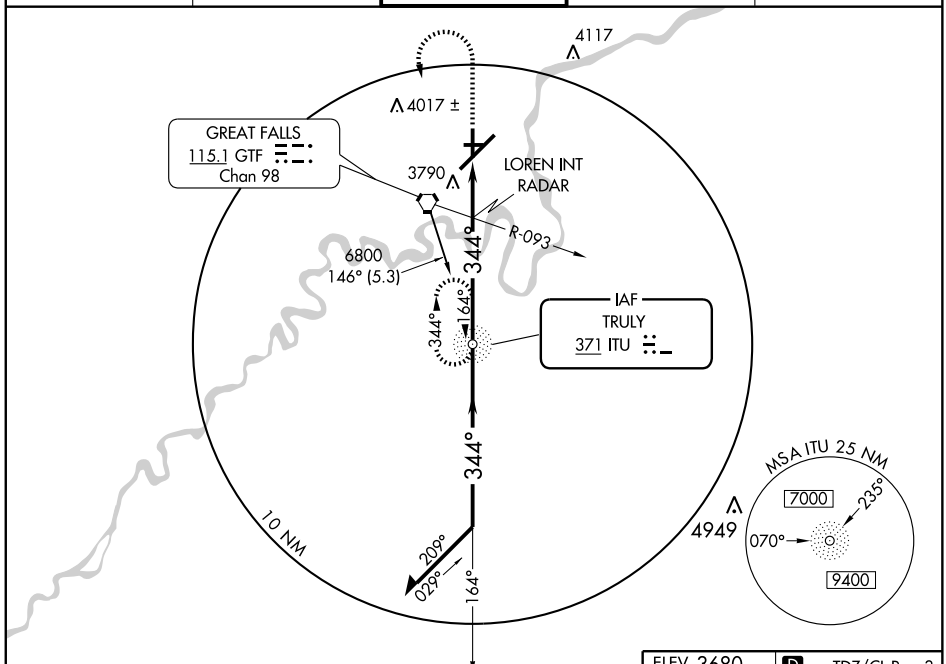
NW-1, 08 APR 2010 to 06 MAY 2010

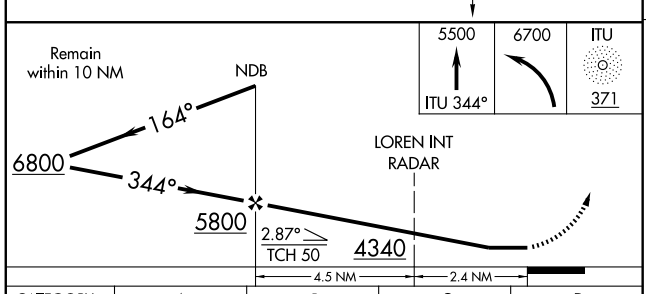
NDB ITU	APP CRS	Rwy ldg	5070
371	344°	TDZE	3667
		Apt Elev	3680

NDB RWY 34
GREAT FALLS INTL (GTF)

MISSED APPROACH: Climb to 5500 via ITU NDB 344° bearing, then left turn to 6700 direct ITU NDB and hold.

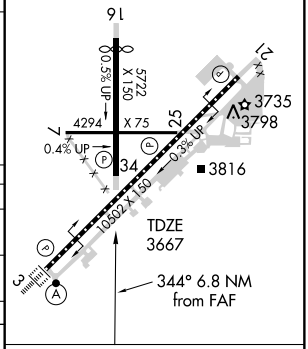
ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6





ELEV 3680 D

TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 7-25
HIRL Rwys 3-21 and 16-34



CATEGORY	A	B	C	D
S-34	4340-1 673 (700-1)		4340-2 673 (700-2)	4340-2¼ 673 (700-2¼)
CIRCLING	4340-1 660 (700-1)		4340-2 660 (700-2)	4340-2¼ 660 (700-2¼)
LOREN INT/RADAR MINIMUMS				
S-34	4120-1 453 (500-1)		4120-1¼ 453 (500-1¼)	4120-1½ 453 (500-1½)
CIRCLING	4120-1 440 (500-1)	4140-1 460 (500-1)	4140-1½ 460 (500-1½)	4240-2 560 (600-2)

FAF to MAP 6.8 NM

Knots	60	90	120	150	180
Min:Sec	6:48	4:32	3:24	2:43	2:16

NW-1. 08 APR 2010 to 06 MAY 2010

WAAS CH 70602 W03A	APP CRS 029°	Rwy ldg 10502 TDZE 3680 Apt Elev 3680

RNAV (GPS) RWY 3
GREAT FALLS INTL (GTF)

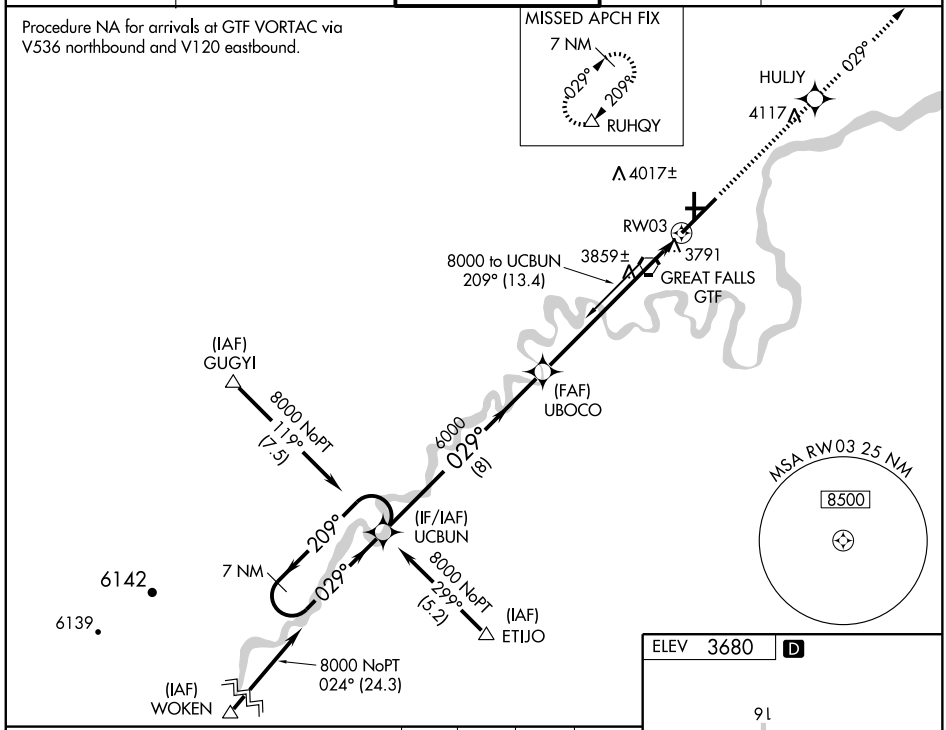
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 42°C (107°F).

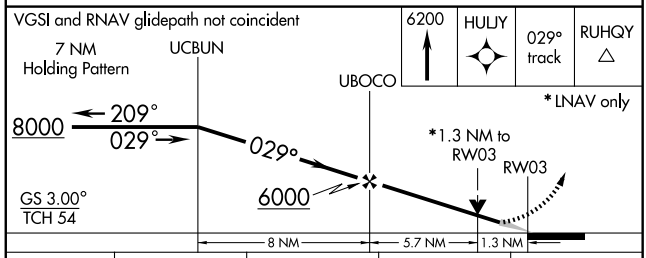
ALSF-2

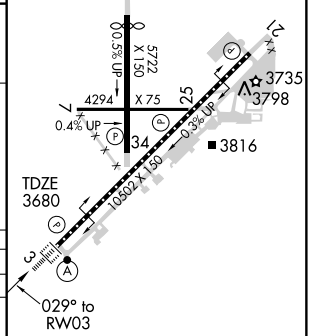
MISSED APPROACH: Climb to 6200 direct HULJY and via 029° track to RUHQY and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6

Procedure NA for arrivals at GTF VORTAC via V536 northbound and V120 eastbound.







CATEGORY	A	B	C	D
LPV DA	3930/24 250 (300-½)			
LNAV/VNAV DA	4067/40 387 (400-¾)			
LNAV MDA	4160/24 480 (500-½)		4160/40 480 (500-¾)	4160/50 480 (500-1)
CIRCLING	4160-1 480 (500-1)		4160-1½ 480 (500-1½)	4240-2 560 (600-2)

TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 7-25
HIRL Rwys 3-21 and 16-34

NW-1, 08 APR 2010 to 06 MAY 2010

VORTAC GTF 115.1 Chan 98	APP CRS 029°	Rwy ldg 10502 TDZE 3680 Apt Elev 3680

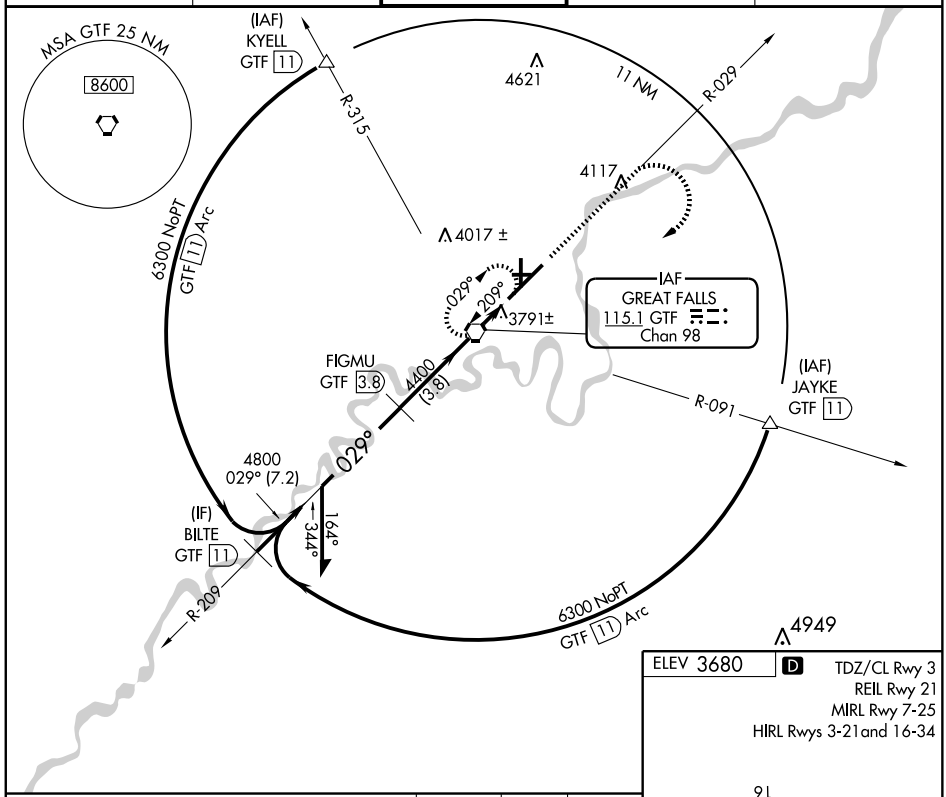
VOR/DME RWY 3
GREAT FALLS INTL (GTF)

For inoperative ALSF-2, increase S-3 Cat. D visibility to RVR 6000.

ALSF-2

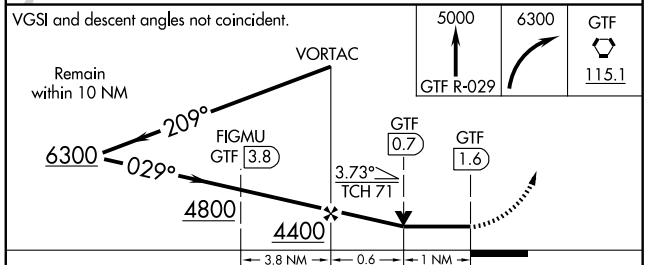
MISSED APPROACH: Climb to 5000 via GTF VORTAC R-029 then climbing right turn to 6300 direct GTF VORTAC and hold, continue climb-in-hold to 6300.

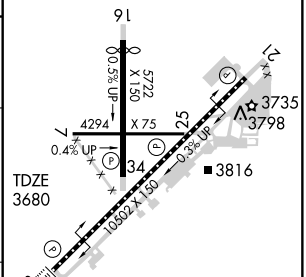
ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



ELEV 3680 D

TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 7-25
HIRL Rwys 3-21and 16-34





CATEGORY	A	B	C	D
S-3	4060/24 380 (400-½)			4060/50 380 (400-1)
CIRCLING	4120-1 440 (500-1)	4140-1 460 (500-1)	4140-1½ 460 (500-1½)	4240-2 560 (600-2)

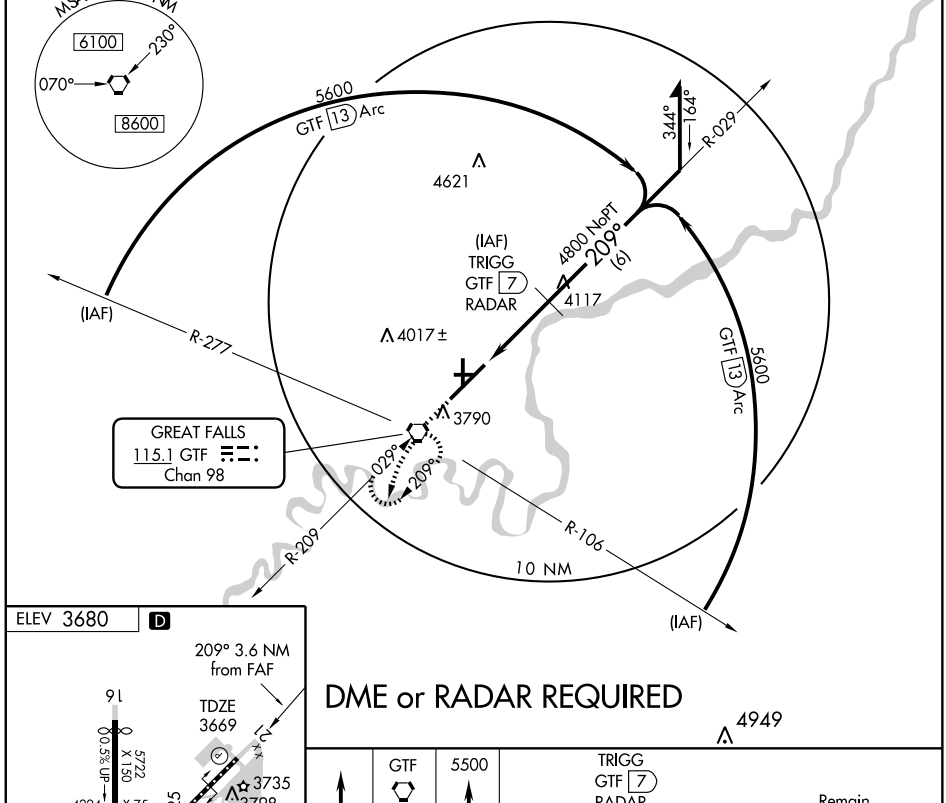
NW-1, 08 APR 2010 to 06 MAY 2010

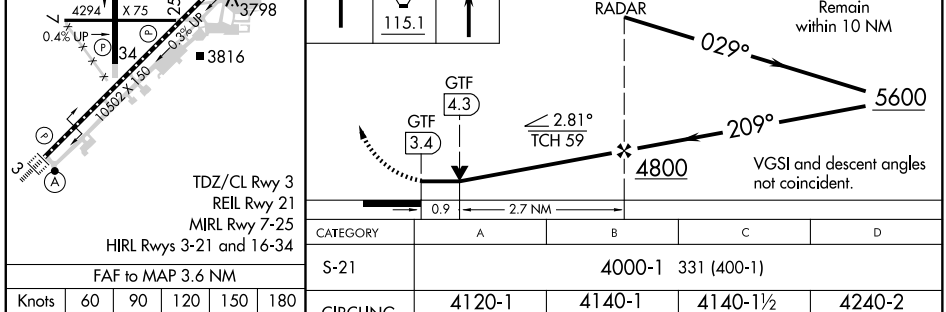
VORTAC GTF 115.1 Chan 98	APP CRS 209°	Rwy ldg 10502 TDZE 3669 Apt Elev 3680

VOR RWY 21
GREAT FALLS INTL (GTF)

MISSED APPROACH: Climb direct to GTF VORTAC continue climb to 5500 in GTF VORTAC holding pattern.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6





FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

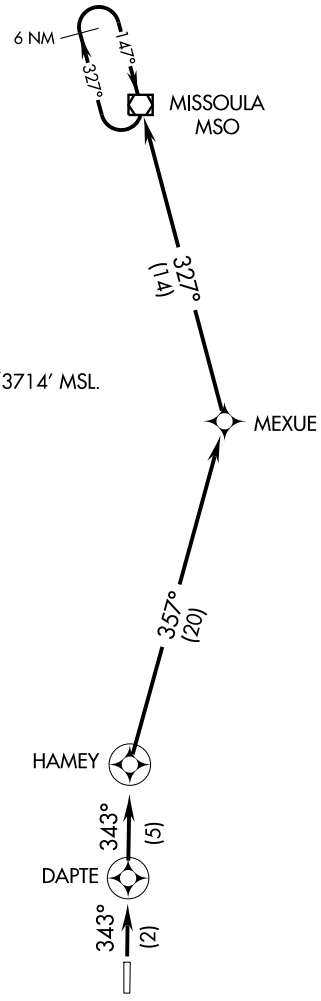
CATEGORY	A	B	C	D
S-21	4000-1 331 (400-1)			
CIRCLING	4120-1 440 (500-1)	4140-1 460 (500-1)	4140-1½ 460 (500-1½)	4240-2 560 (600-2)

NW-1, 08 APR 2010 to 06 MAY 2010

HAMEY ONE DEPARTURE (RNAV) (OBSTACLE)

HAMILTON/ RAVALLI COUNTY (6S5)
HAMILTON, MONTANA

SPOKANE DEP CON
124.9 298.95
SALT LAKE CITY CENTER
133.4 285.4



TAKE-OFF MINIMUMS
Rwy 16: NA, Obstacles.
Rwy 34: Standard.

TAKE-OFF OBSTACLES
Rwy 34: tree 1044′ from DER,
258′ right of centerline, 80′ AGL/3714′ MSL.
Rwy 16: NA, Obstacles.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Not authorized, Obstacles.
TAKE-OFF RWY 34: Climb to 9000 direct DAPTE WP, direct HAMEY WP, then via depicted route to MSO VOR/DME, Thence....

....all aircraft climb in MSO VOR/DME holding pattern (hold NW, RT, 147° inbound) to cross MSO VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

APP CRS	Rwy ldg	N/A
163°	TDZE	N/A
	Apt Elev	3642

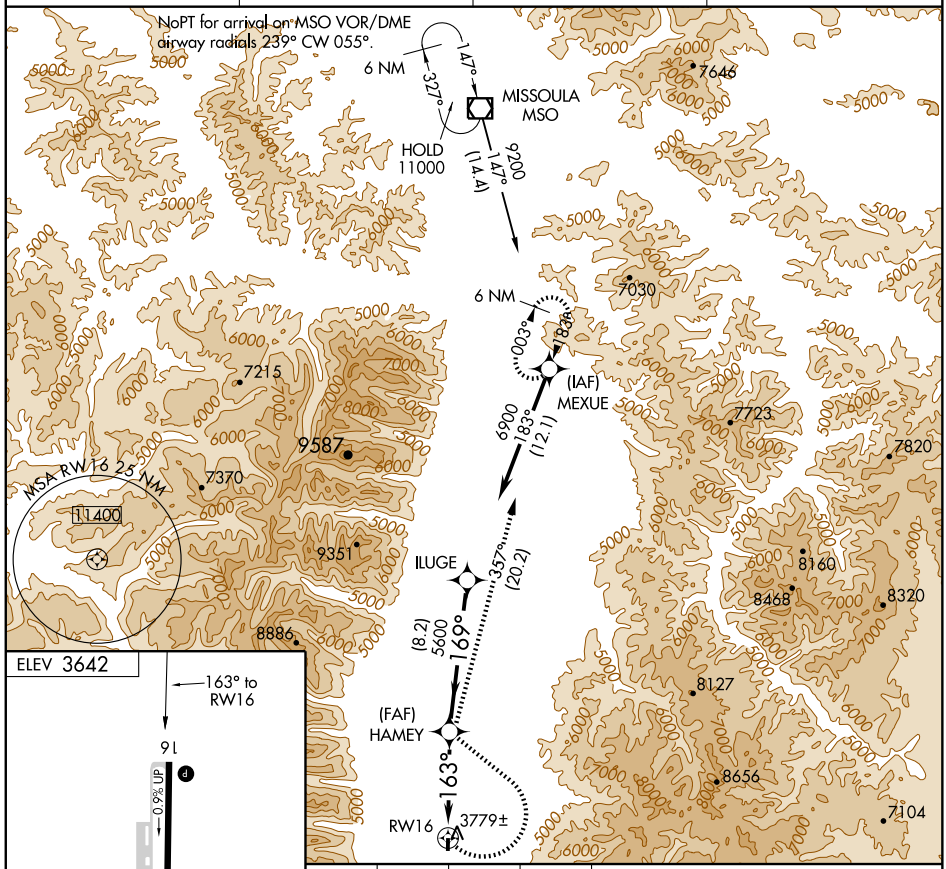
RNAV (GPS)-A

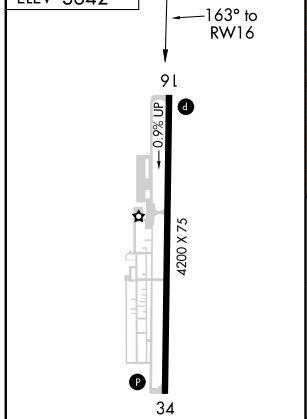
HAMILTON/ RAVALLI COUNTY (6S5)

DME/DME RNP-0.3 NA.
When local altimeter setting not received, procedure NA.
Procedure NA at night.

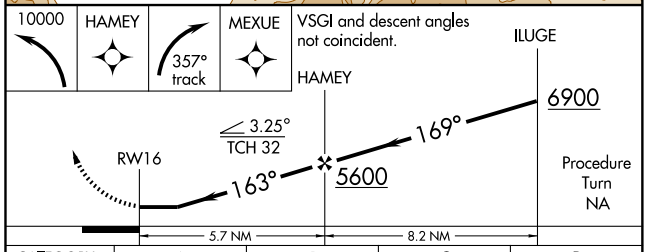
MISSED APPROACH: Climbing left turn to 10000 direct HAMEY WP and right turn via 357° track to MEXUE WP and hold.

AWOS-A	SPOKANE APP CON ★	SALT LAKE CITY CENTER	UNICOM
119.825	124.9 298.95	133.4 285.4	122.8 (CTAF) L





MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
CIRCLING	4660-1¼ 1018 (1100-1¼)	4660-1½ 1018 (1100-1½)	NA	

NW-1. 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	N/A
001°	TDZE	N/A
	Apt Elev	3642

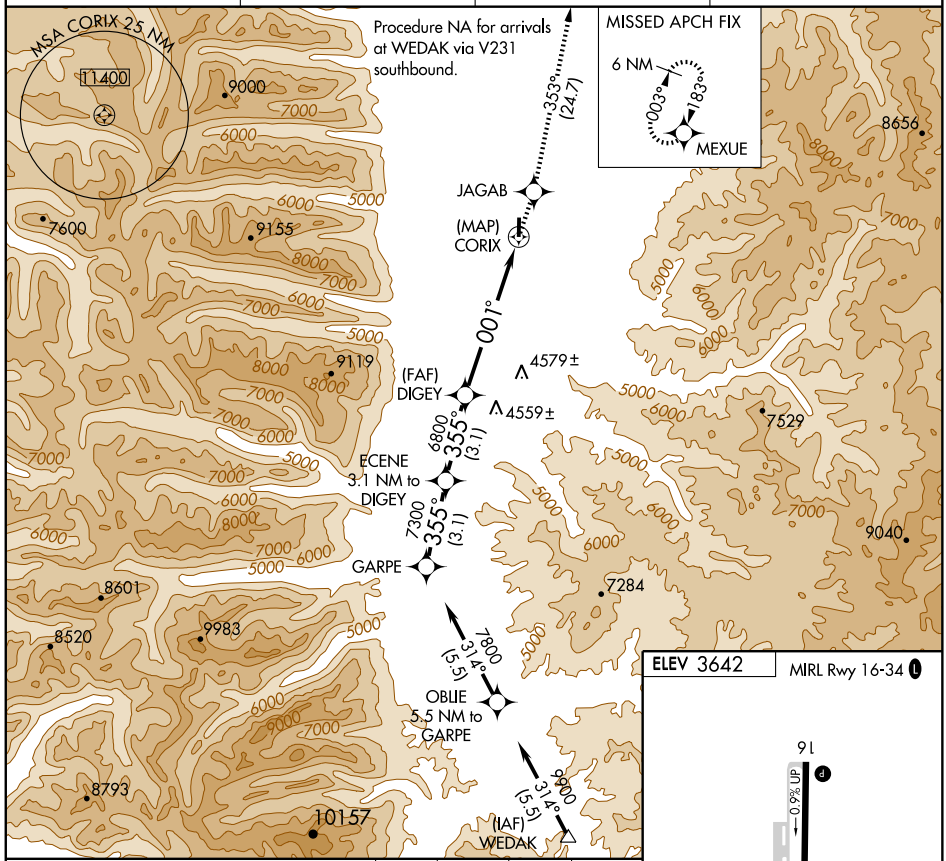
RNAV (GPS)-B

HAMILTON/ RAVALLI COUNTY (6S5)

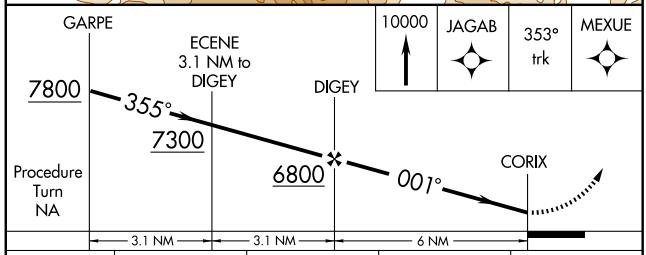
DME/DME RNP-0.3 NA.
When local altimeter setting not received, procedure NA.
Procedure NA at night.

MISSED APPROACH: Climb to 10000 direct JAGAB WP and via 353° track to MEXUE WP and hold.

AWOS-A	SPOKANE APP CON ★	SALT LAKE CITY CENTER	UNICOM
119.825	124.9 298.95	132.4 338.3	122.8 (CTAF) L



ELEV 3642 MIRL Rwy 16-34 L



001° to CORIX

CATEGORY	A	B	C	D
CIRCLING	4740-1¼ 1098 (1100-1¼)	4740-1½ 1098 (1100-1½)	NA	

NW-1. 08 APR 2010 to 06 MAY 2010

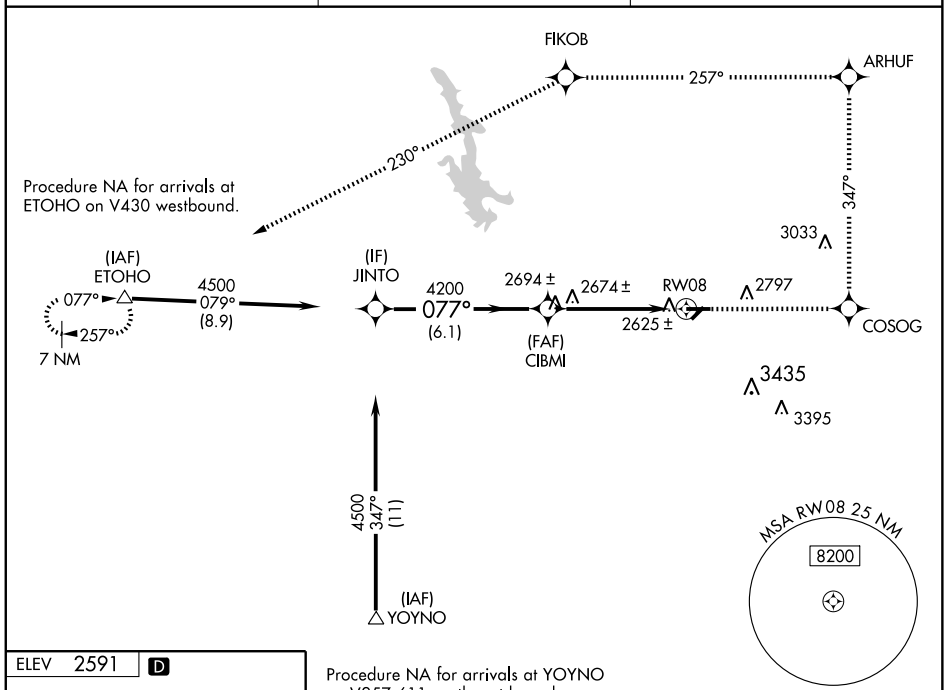
WAAS CH 99316 W08A	APP CRS 077°	Rwy ldg 5205 TDZE 2585 Apt Elev 2591

RNAV (GPS) RWY 8
HAVRE CITY-COUNTY (HVR)

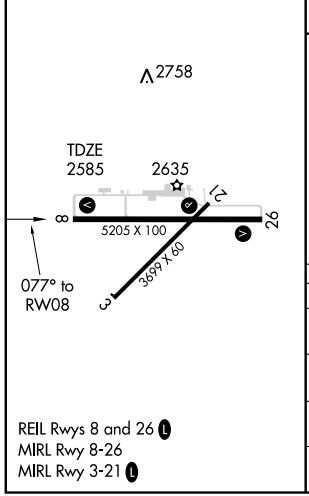
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (109°F). DME/DME RNP- 0.3 NA.

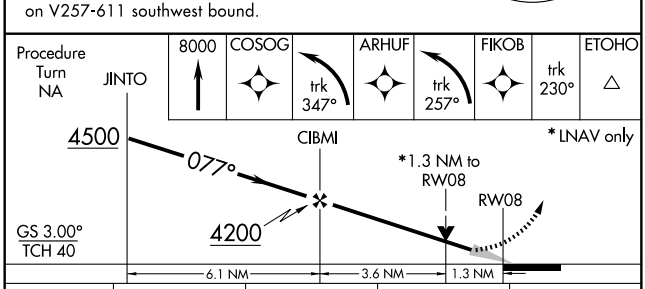
MISSED APPROACH: Climb to 8000 direct COSOG and left turn via track 347° to ARHUF and left turn via track 257° to FIKOB and via track 230° to ETOHO and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.225	123.65	122.8 (CTAF) L



Procedure NA for arrivals at YOYNO on V257-611 southwest bound.





CATEGORY	A	B	C	D
LPV DA	2835-1 250 (300-1)			
LNAV/VNAV DA	2906-1¼ 321 (400-1¼)			
LNAV MDA	3020-1 435 (500-1)		3020-1¼ 435 (500-1¼)	3020-1½ 435 (500-1½)
CIRCLING	3060-1 469 (500-1)	3100-1 509 (600-1)	3100-1½ 509 (600-1½)	3160-2 569 (600-2)

NW-1. 08 APR 2010 to 06 MAY 2010

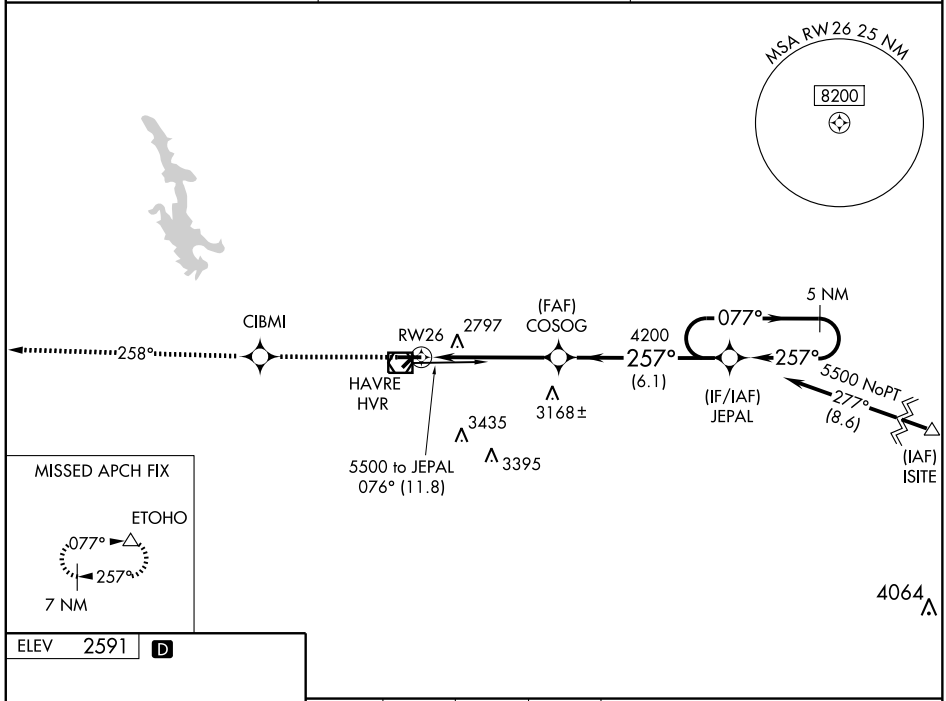
WAAS CH 48816 W26A	APP CRS 257°	Rwy ldg 5205 TDZE 2586 Apt Elev 2591

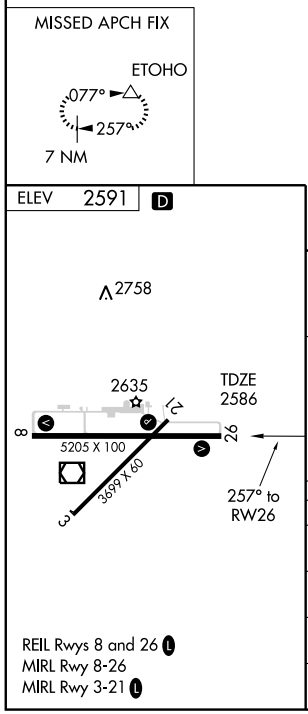
RNAV (GPS) RWY 26
HAVRE CITY-COUNTY (HVR)

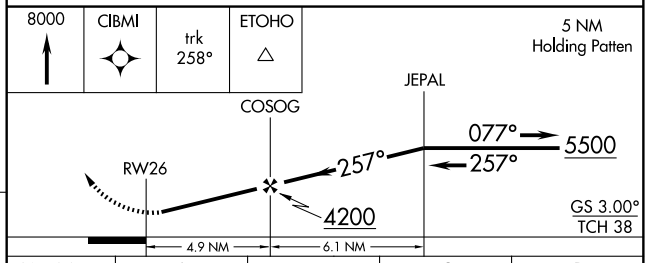
When VGSI inoperative, procedure NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (109°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 8000 direct CIBMI and via track 258° to ETOHO and hold, continue climb-in-hold to 8000.

ASOS	GREAT FALLS RADIO	UNICOM
135.225	123.65	122.8 (CTAF) L







CATEGORY		A	B	C	D
LPV	DA	2836-1 250 (300-1)			
LNAV/VNAV	DA	3097-1¾ 511 (600-1¾)			
LNAV MDA		3060-1 474 (500-1)		3060-1¼ 474 (500-1¼)	3060-1½ 474 (500-1½)
CIRCLING		3060-1 469 (500-1)	3100-1 509 (600-1)	3100-1½ 509 (600-1½)	3160-2 569 (600-2)

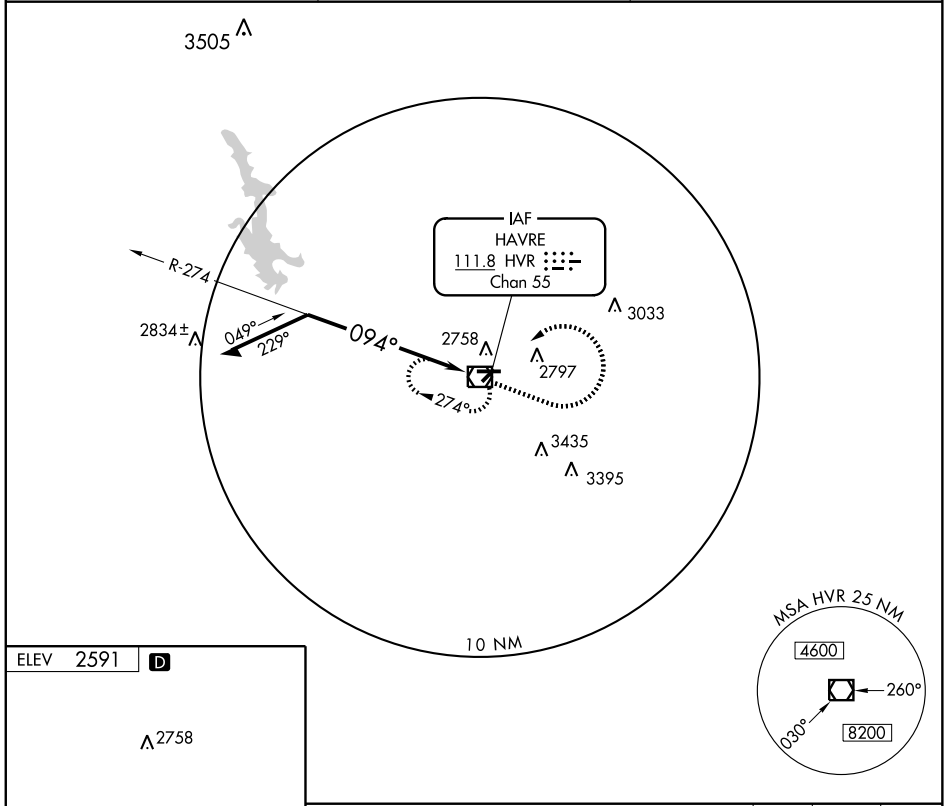
REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L

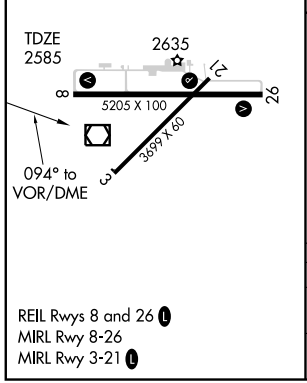
VOR/DME HVR	APP CRS	Rwy ldg	5205
111.8	094°	TDZE	2585
Chan 55		Apt Elev	2591

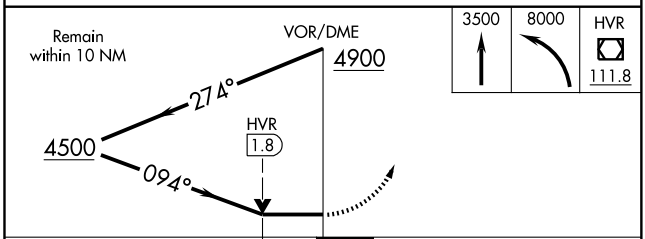
VOR RWY 8
HAVRE CITY-COUNTY (HVR)

MISSED APPROACH: Climb to 3500 then climbing left turn to 8000 direct HVR VOR/DME and hold, continue climb-in-hold to 8000.

ASOS	GREAT FALLS RADIO	UNICOM
135.225	123.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-8	3140-1 555 (600-1)		3140-1½ 555 (600-1½)	3140-1¾ 555 (600-1¾)
CIRCLING	3140-1 549 (600-1)		3140-1½ 549 (600-1½)	3160-2 569 (600-2)

REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L

NW-1, 08 APR 2010 to 06 MAY 2010

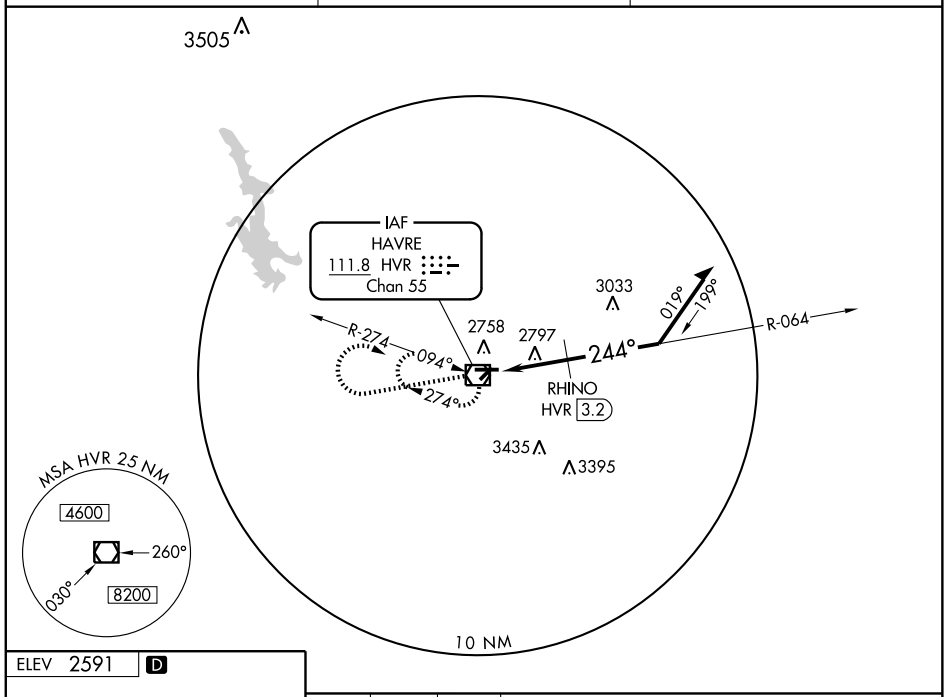
VOR/DME HVR	APP CRS	Rwy ldg	5205
111.8	244°	TDZE	2586
Chan 55		Apt Elev	2591

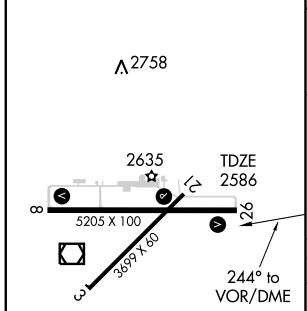
VOR RWY 26
HAVRE CITY-COUNTY (HVR)

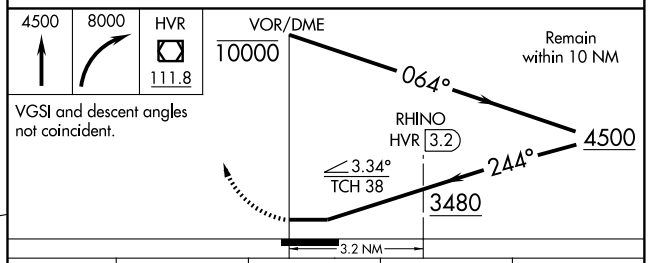
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4500 then climbing right turn to 8000 direct HVR VOR/DME and hold, continue climb-in-hold to 8000.

ASOS	GREAT FALLS RADIO	UNICOM
135.225	123.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-26	3480-1¼ 894 (900-1¼)		3480-2¾ 894 (900-2¾)	3480-3 894 (900-3)
CIRCLING	3480-1¼ 889 (900-1¼)		3480-2¾ 889 (900-2¾)	3480-3 889 (900-3)
RHINO FIX MINIMUMS				
S-26	3060-1 474 (500-1)		3060-1¼ 474 (500-1¼)	3060-1½ 474 (500-1½)
CIRCLING	3060-1 469 (500-1)	3100-1 509 (600-1)	3100-1½ 509 (600-1½)	3160-2 569 (600-2)

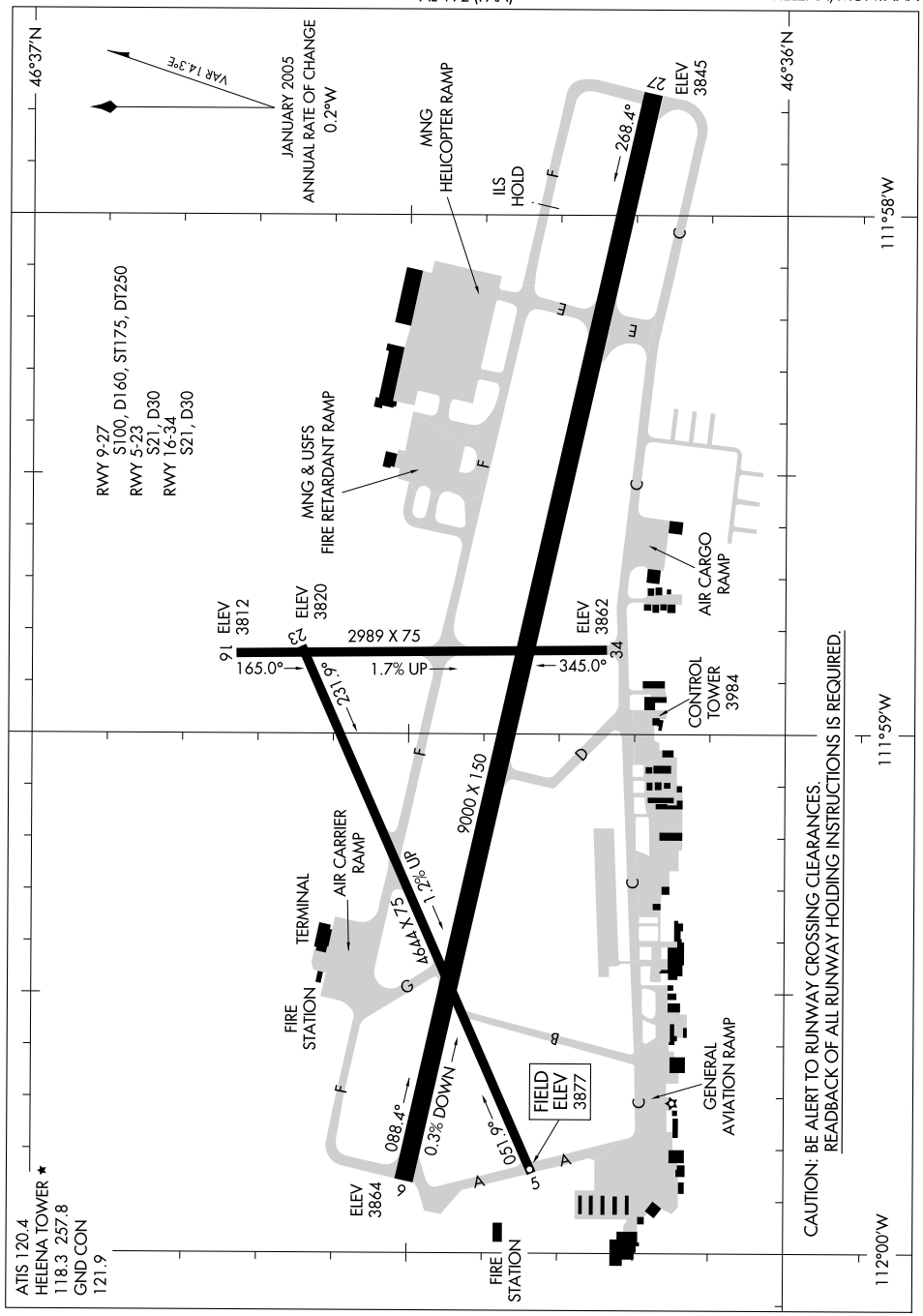
REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L

NW-1, 08 APR 2010 to 06 MAY 2010

AIRPORT DIAGRAM

AL-192 (FAA)

HELENA RGNL (HLN)
HELENA, MONTANA



NW-1, 08 APR 2010 to 06 MAY 2010

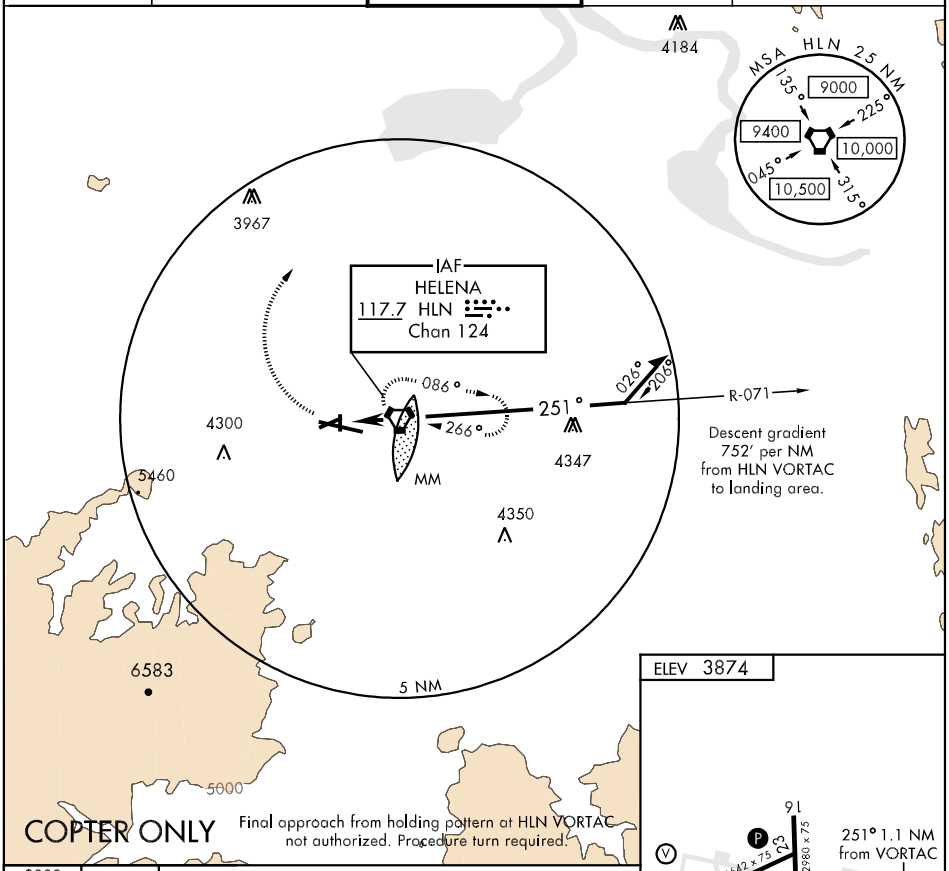
COPTER VOR 251°

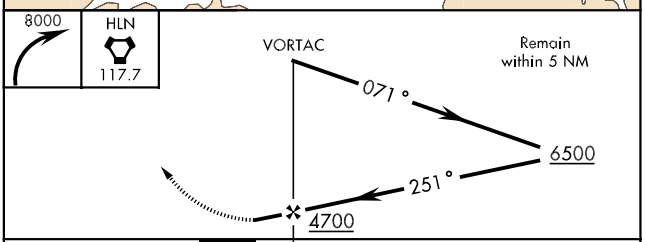
VORTAC HLN 117.7 Chan 124	APCH CRS 251°	Rwy ldg N/A TDZE 3848 Arpt Elev 3874	AL-192 [USA]	HELENA REGIONAL (KHLN)

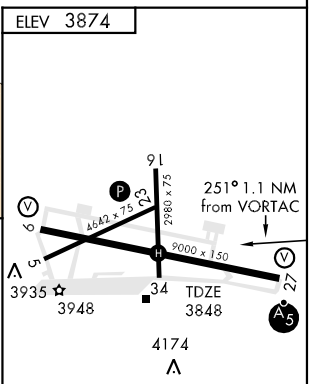
NA when tower clsd.

MISSED APROACH: Climbing right turn to 8000 direct HLN VORTAC and hold.

ATIS ★	HELENA APP CON	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95







REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

CATEGORY	COPTER
H-251°	4260-½ 412 (400-½)

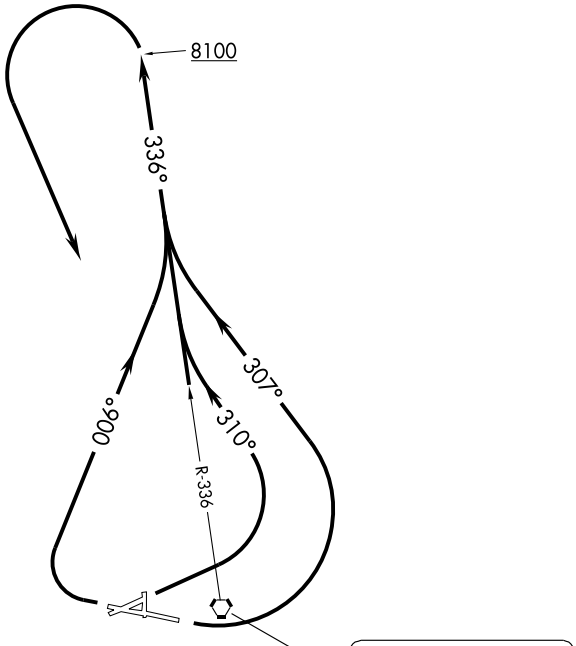
FAF to MAP 1.1 NM					
Knots	45	60	75	90	105
Min:Sec	1:28	1:06	0:53	0:44	0:37

HELENA THREE DEPARTURE

SL-192 (FAA)

HELENA RGNL (HLN)
HELENA, MONTANA

HELENA TOWER ★
118.3 (CTAF) 257.8
HELENA DEP CON ★
119.5 229.4
SALT LAKE CENTER
133.4 285.4



TAKE-OFF MINIMUMS

Rwy 5: Standard with minimum climb of 250 feet per NM to 8100.
Rwy 9: Standard with minimum climb of 240 feet per NM to 8100.
Rwys 16, 23: NA- obstacles.
Rwy 27: Standard with minimum climb of 390 feet per NM to 8100.
Rwy 34: NA- ATC.

TAKE-OFF OBSTACLE NOTES

Rwy 5: Ground beginning 5′ from DER, 495′ right of centerline, up to 3826′ MSL.
Fence beginning 423′ from DER, 331′ right of centerline, up to 10′ AGL/ 3832′ MSL.
Rwy 27: Building 1593′ from DER, 731′ left of centerline, 58′AGL/6385′ MSL.
Ground beginning 101′ from DER, 346′ left of centerline, up to 3871′ MSL.
Tree 1567′ DER, 616′ left of centerline, 47′ AGL/ 3906′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 5: Climbing left turn heading 310° to intercept HLN VORTAC R-336 to 8100′, then climbing left turn to 9000′ via HLN VORTAC R-336 to HLN VORTAC.

TAKE-OFF RUNWAY 9: Climbing left turn heading 307° to intercept HLN VORTAC R-336 to 8100′, then climbing left turn to 9000′ via HLN VORTAC R-336 to HLN VORTAC.

TAKE-OFF RUNWAY 27: Climbing right turn heading 006° to intercept HLN VORTAC R-336 to 8100′, then climbing left turn to 9000′ via HLN VORTAC R-336 to HLN VORTAC.

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LOC I-HLN	APP CRS	Rwy ldg	9000
110.1	267°	TDZE	3852
		Apt Elev	3877

ILS or LOC Y RWY 27

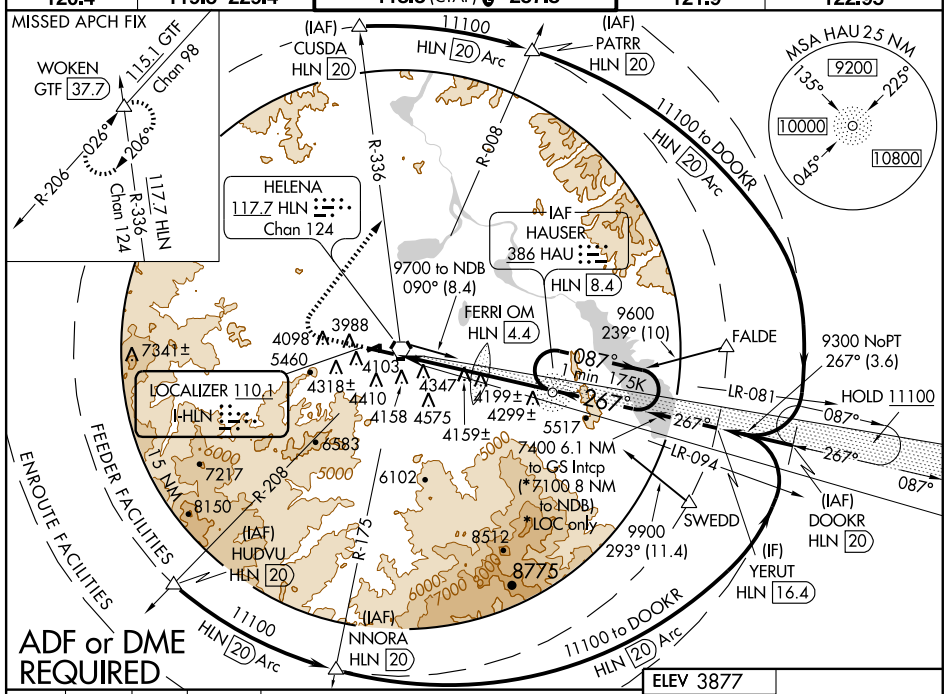
HELENA RGNL (HLN)

Circling NA for Cats. D and E south of Rwy 9-27. Inoperative table does not apply to S-LOC 27 Cats. A-B. For inoperative MALSR, increase S-ILS 27 all Cats. visibility to 2 miles, S-LOC 27 Cat. E visibility to 3 miles, FERRI fix minimums: S-LOC 27 Cat E visibility to 2½ miles. DME arc to final approach required for turbojet aircraft. Holding at HAU NDB authorized for Category A and B aircraft only.

MALSR

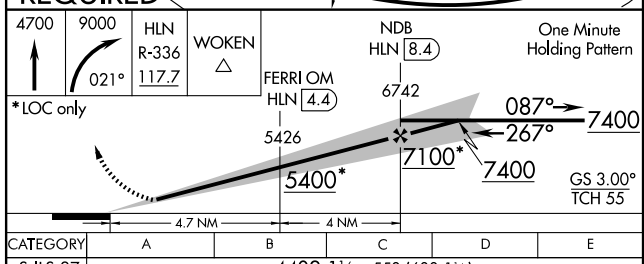
MISSED APPROACH: Climb to 4700 then climbing right turn to 9000 via heading 021° and HLN VORTAC R-336 to WOKEN INT and hold.

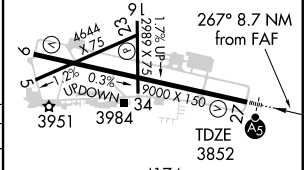
ATIS	HELENA APP CON *	HELENA TOWER *	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95



ADF or DME REQUIRED

ELEV 3877





CATEGORY	A	B	C	D	E
S-ILS 27	4402-1½ 550 (600-1½)				
S-LOC 27	5400-1¼ 1548 (1600-1¼)	5400-1½ 1548 (1600-1½)	5400-2½ 1548 (1600-2½)		
CIRCLING	5400-1¼ 1523 (1600-1¼)	5400-1½ 1523 (1600-1½)	5400-3 1523 (1600-3)		
FERRI FIX MINIMUMS *					
S-LOC 27	4560-½ 708 (700-½)		4560-1½ 708 (700-1½)	4560-1¾ 708 (700-1¾)	4560-2 708 (700-2)
CIRCLING	4640-1 763 (800-1)		4740-2½ 863 (900-2½)	4740-2¾ 863 (900-2¾)	4840-3 963 (1000-3)

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

FAF to MAP 8.7 NM					
Knots	60	90	120	150	180
Min:Sec	8:42	5:48	4:21	3:29	2:54

NW-1. 08 APR 2010 to 06 MAY 2010

LOC I-HLN	APP CRS	Rwy ldg	9000
110.1	267°	TDZE	3852
		Apt Elev	3877

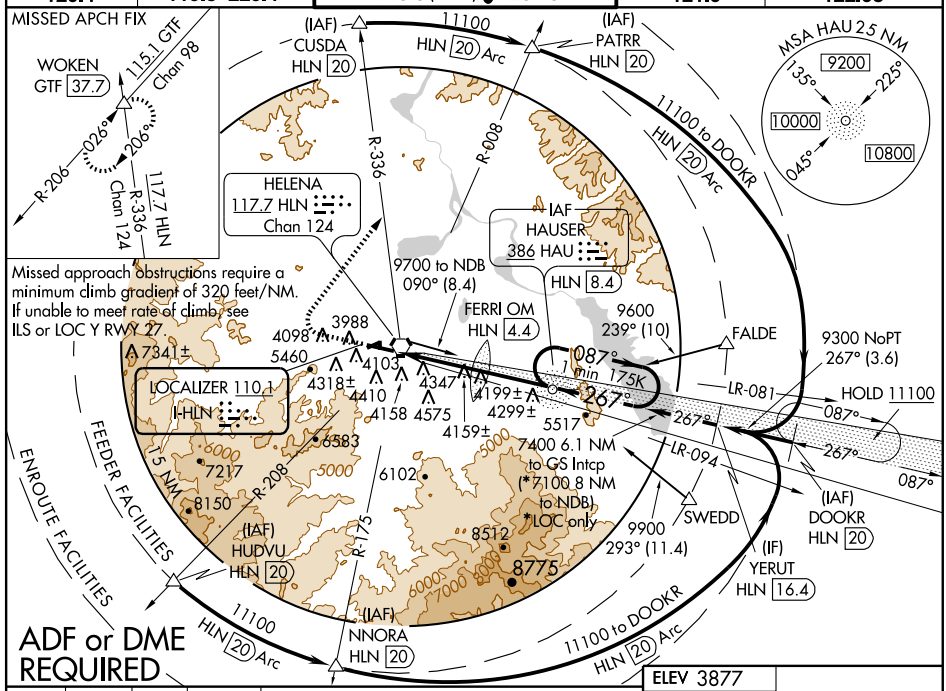
ILS or LOC Z RWY 27
HELENA RGNL (HLN)

Circling NA for Cats. D and E south of Rwy 9-27. DME Arc to final approach required for turbojet aircraft. Holding at HAU NDB authorized for Category A and B aircraft only. Inoperative table does not apply to S-LOC 27 Cats. A-B. For inoperative MALSR, increase S-LOC 27 Cat. E visibility to 3 miles, FERRI fix minimums: S-LOC 27 Cat E visibility to 3 miles.

MALSR

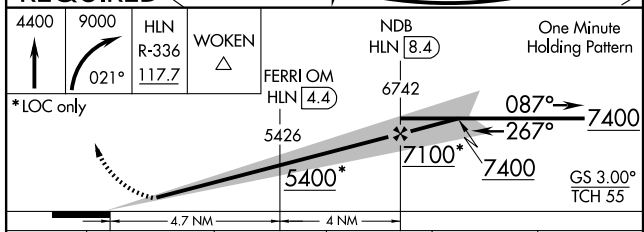
MISSED APPROACH: Climb to 4400 then climbing right turn to 9000 via heading 021° and HLN VORTAC R-336 to WOKEN INT and hold.

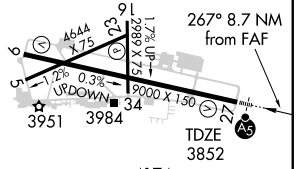
ATIS	HELENA APP CON *	HELENA TOWER *	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95



ADF or DME REQUIRED

ELEV 3877





CATEGORY	A	B	C	D	E
S-ILS 27	4052-½ 200 (200-½)				
S-LOC 27	5400-1¼ 1548 (1600-1¼)	5400-1½ 1548 (1600-1½)	5400-2½ 1548 (1600-2½)		
CIRCLING	5400-1¼ 1523 (1600-1¼)	5400-1½ 1523 (1600-1½)	5400-3 1523 (1600-3)		
FERRI FIX MINIMUMS *					
S-LOC 27	4420-½ 568 (600-½)		4420-1 568 (600-1)	4420-1¼ 568 (600-1¼)	4420-1½ 568 (600-1½)
CIRCLING	4640-1 763 (800-1)	4640-1¼ 763 (800-1¼)	4740-2½ 863 (900-2½)	4740-2¾ 863 (900-2¾)	4840-3 963 (1000-3)

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

FAF to MAP 8.7 NM

Knots	60	90	120	150	180
Min:Sec	8:42	5:48	4:21	3:29	2:54

NW-1. 08 APR 2010 to 06 MAY 2010

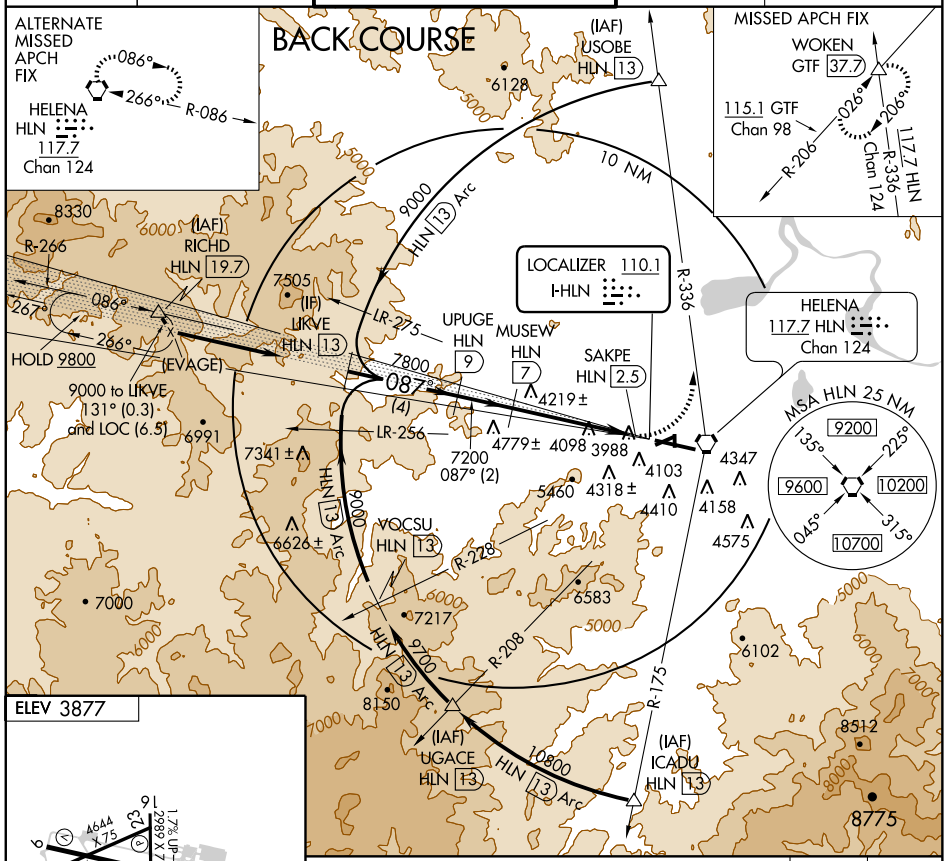
LOC I-HLN 110.1	APP CRS 087°	Rwy ldg N/A TDZE N/A Apt Elev 3877

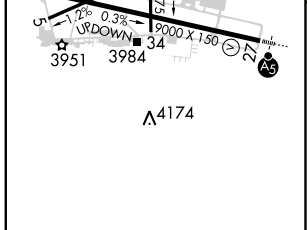
LOC/DME BC-C
HELENA RGNL (HLN)

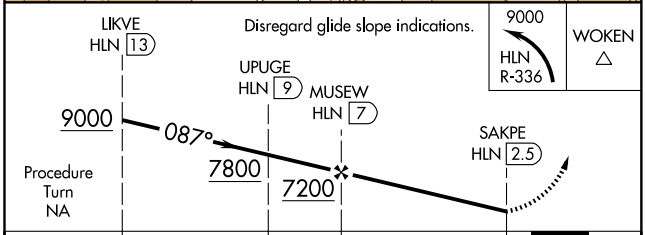
DME from HLN VORTAC, simultaneous reception of I-HLN and HLN DME required.
Circling NA south of Rwy 9-27 for Cat D.

MISSED APPROACH: Climbing left turn to 9000 via HLN VORTAC R-336 to WOKEN INT and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
CIRCLING	5140-1¼ 1263 (1300-1¼)	5140-1½ 1263 (1300-1½)	5140-3	1263 (1300-3)

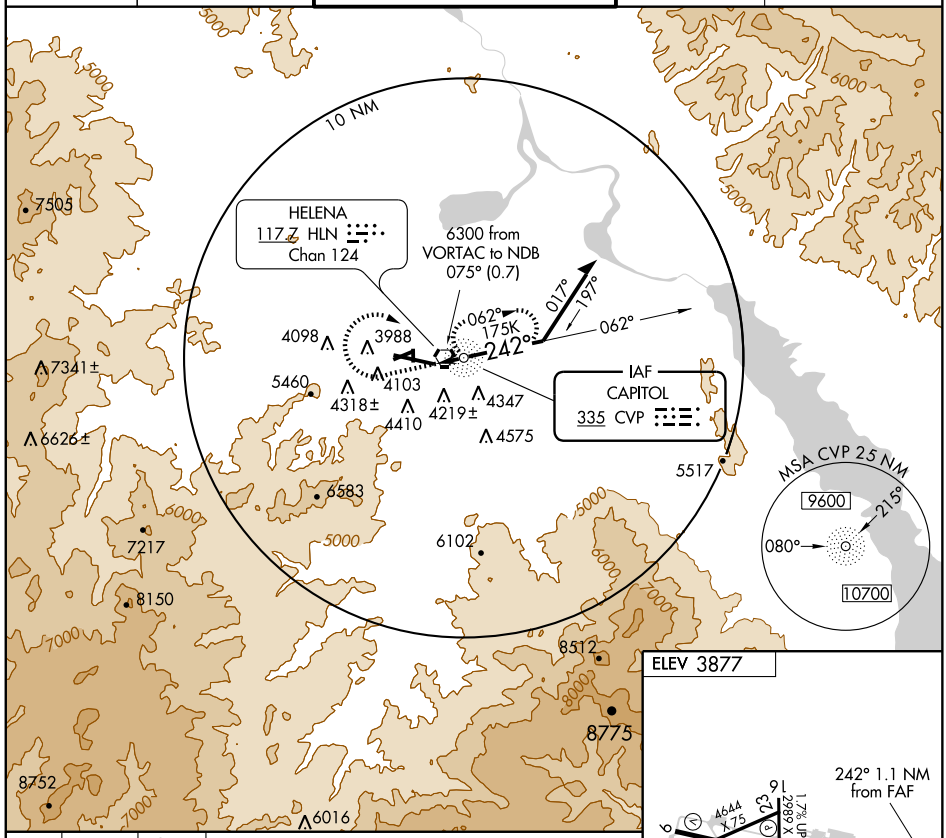
REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

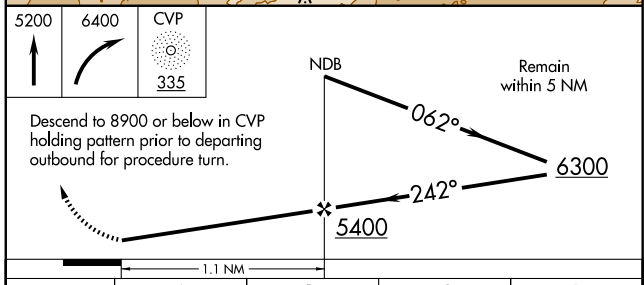
NDB CVP	APP CRS	Rwy ldg / TDZE / Apt Elev
335	242°	N/A / N/A / 3877

NDB-D
HELENA RGNL (HLN)

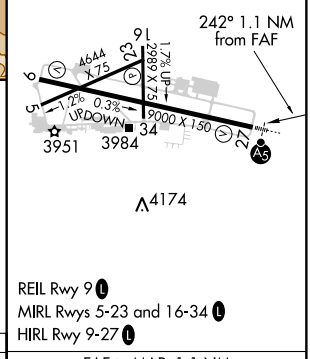
MISSED APPROACH: Climb to 5200, then climbing right turn to 6400 direct CVP NDB and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95





Descend to 8900 or below in CVP holding pattern prior to departing outbound for procedure turn.



REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

CATEGORY	A	B	C	D
CIRCLING	4980-1¼ 1103 (1200-1¼)	NA		

FAF to MAP 1.1 NM					
Knots	60	90	120	150	180
Min:Sec	1:06	0:44	0:33	0:26	0:22

NW-1, 08 APR 2010 to 06 MAY 2010

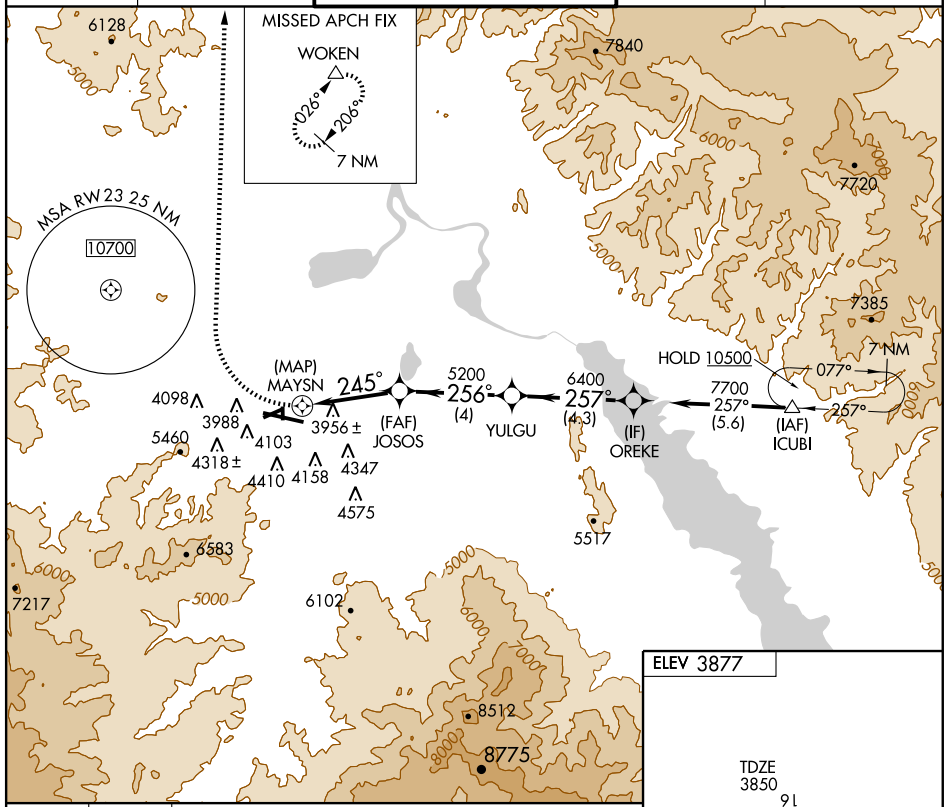
APP CRS	Rwy ldg	4644
245°	TDZE	3850
	Apt Elev	3877

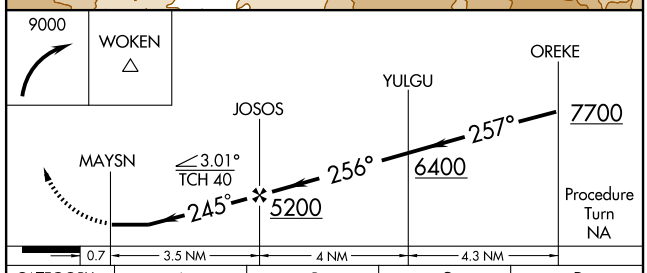
RNAV (GPS) RWY 23
HELENA RGNL (HLN)

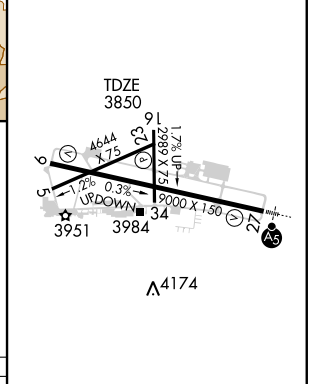
Circling NA for Cat D south of Rwy 9/27.
Visibility reduction by helicopters NA.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing right turn to 9000 direct WOKEN and hold, continue climb-in-hold to 9000.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
LNAV MDA	4760-1¼ 910 (900-1¼)		4760-2¾ 910 (900-2¾)	4760-3 910 (900-3)
CIRCLING	4760-1¼ 883 (900-1¼)		4760-2¾ 883 (900-2¾)	4760-3 883 (900-3)

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

NW-1. 08 APR 2010 to 06 MAY 2010

WAAS CH 69405 W27A	APP CRS 267°	Rwy ldg 9000 TDZE 3852 Apt Elev 3877

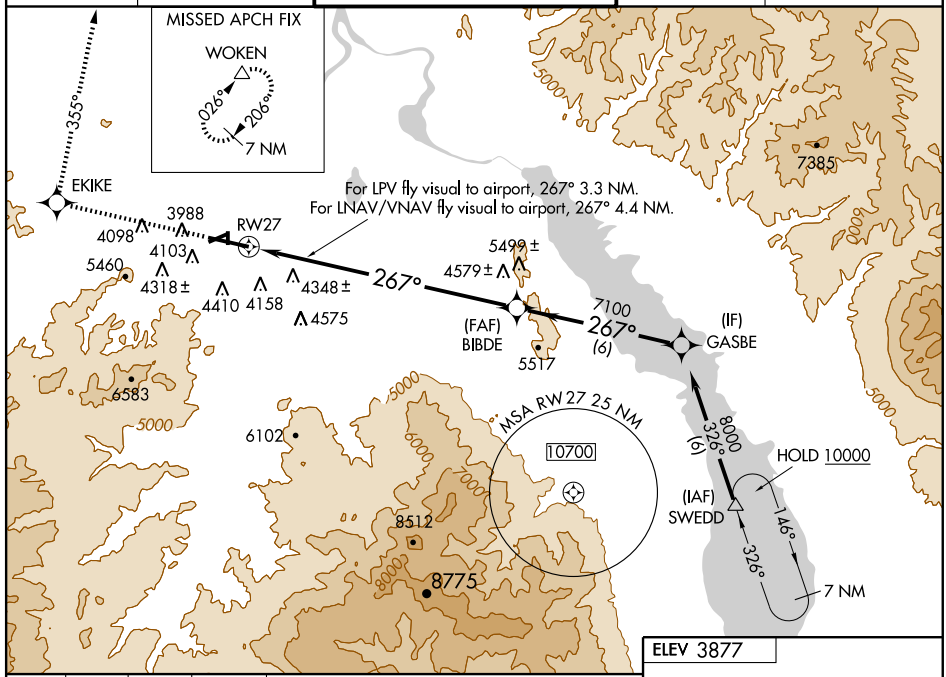
RNAV (GPS) X RWY 27
HELENA RGNL (HLN)

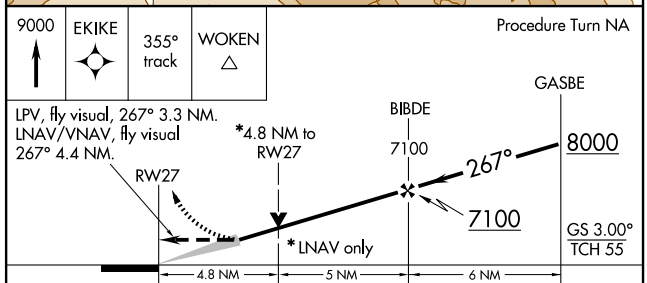
Circling NA for Cat D south of Rwy 9-27.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 42°C (107°F). DME/DME RNP- 0.3 NA.
Inoperative table does not apply to LNAV Cats A-B.

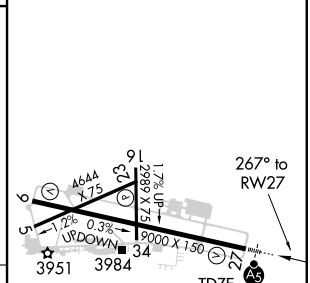
MALSR

MISSED APPROACH: Climb to 9000 direct EKIKE and via 355° track to WOKEN and hold.

ATIS	HELENA APP CON *	HELENA TOWER *	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
LPV DA	4965-2 1113 (1100-2)		4965-3 1113 (1100-3)	
LNAV/VNAV DA	5289-2 1437 (1500-2)		5289-3 1437 (1500-3)	
LNAV MDA	5440-1¼ 1588 (1600-1¼)	5440-1½ 1588 (1600-1½)	5440-2½ 1588 (1600-2½)	
CIRCLING	5440-1¼ 1563 (1600-1¼)	5440-1½ 1563 (1600-1½)	5440-3 1563 (1600-3)	

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	9000
087°	TDZE	3864
	Apt Elev	3877

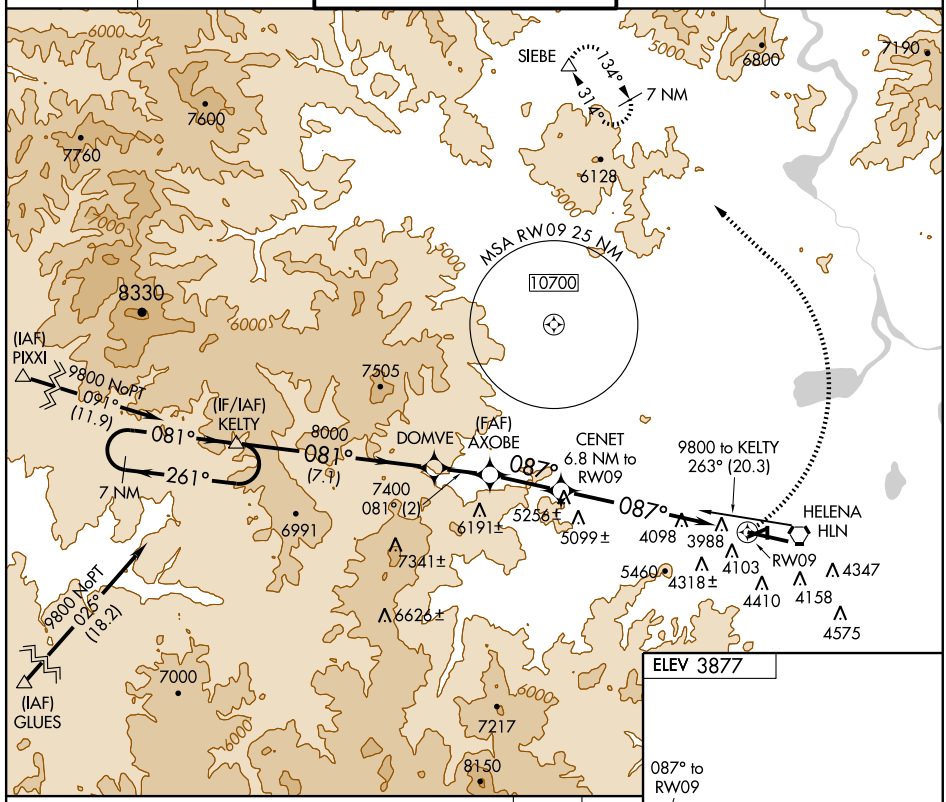
RNAV (GPS) Y RWY 9

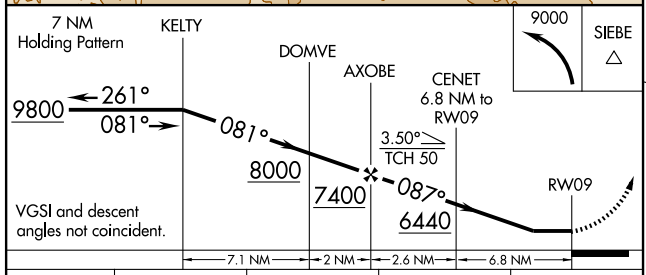
HELENA RGNL (HLN)

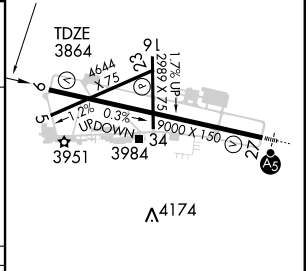
Circling NA for Cat D south of Rwy 9-27.
DME/DME RNP- 0.3 NA.
Visibilty reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 9000 direct SIEBE and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
LNAV MDA	5440-1¼ 1576 (1600-1¼)	5440-1½ 1576 (1600-1½)	5440-3 1576 (1600-3)	
CIRCLING	5440-1¼ 1563 (1600-1¼)	5440-1½ 1563 (1600-1½)	5440-3 1563 (1600-3)	

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

NW-1. 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	9000
267°	TDZE	3852
	Apt Elev	3877

RNAV (RNP) Y RWY 27
HELENA RGNL (HLN)

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 41°C (105°F). For inoperative MALSR, increase RNP 0.22* visibility to 1, and RNP 0.30** visibility to 1½. Missed approach requires RNP less than 1.0. *Missed approach requires minimum climb of 290 feet per NM to 7700. **Missed approach requires minimum climb of 270 feet per NM to 7600; if unable, see RNAV (RNP) Z RWY 27.

MALSR

MISSED APPROACH: Climb to 13000 via 267° track to SAKPE, and via 267° track to MUSEW, and via 267° track to JEBSI, and via 261° track to KELTY, and via 271° track to PIXXI and hold, continue climb-in-hold to 13000.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95

Procedure NA for arrivals on HIA VOR/DME airway radials 276 CW 185 and for arrivals on HLN VORTAC airway radials 009 CW 265 and for arrivals at SUZZY via V343 westbound.

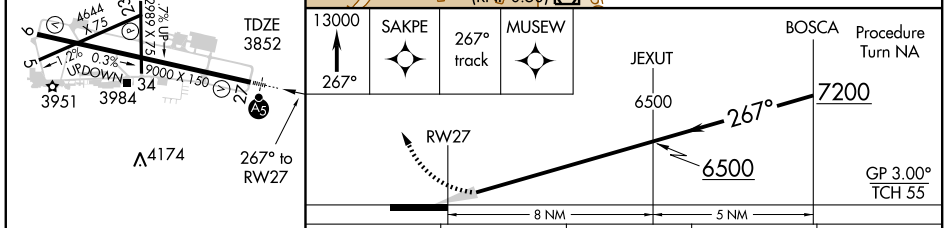
MISSED APCH FIX

086° PIXXI 266° 8 NM; 271° (11.9) KELTY; 261° (9.6) JEBSI

ELEV 3877

TDZE 3852

13000 ↑ 267°	SAKPE	267° track	MUSEW



CATEGORY	A	B	C	D
RNP 0.22 DA*	4133-½ 281 (300-½)			
RNP 0.30 DA**	4287-1 435 (500-1)			

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

NW-1. 08 APR 2010 to 06 MAY 2010

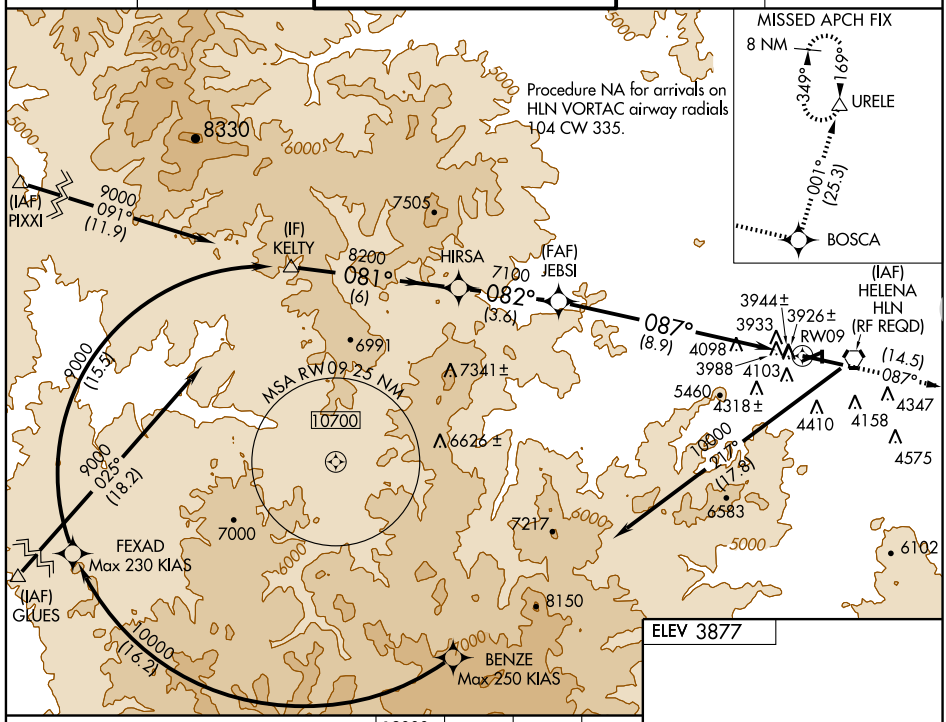
APP CRS	Rwy ldg	9000
087°	TDZE	3864
	Apt Elev	3877

RNAV (RNP) Z RWY 9
HELENA RGNL (HLN)

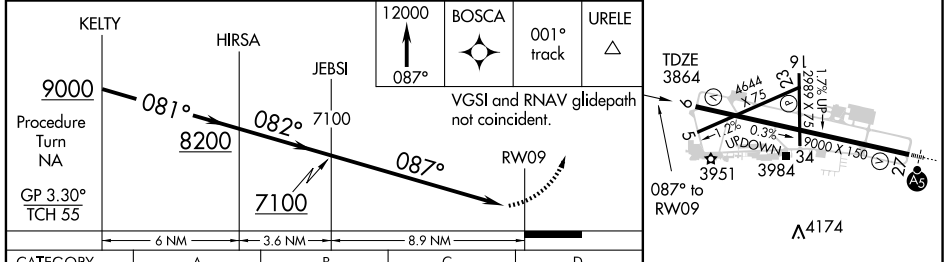
GPS required.
For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 54°C (130°F).
When VGSI inoperative, procedure NA at night.
*Missed approach requires minimum climb of 260′ per NM to 4300.

MISSED APPROACH: Climb to 12000 via 087° track to BOSCA and via 001° track to URELE and hold, continue climb-in-hold to 12000.

ATIS	HELENA APP CON*	HELENA TOWER*	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) (L) 257.8	121.9	122.95



ELEV 3877



CATEGORY	A	B	C	D
RNP 0.11 DA*	4220-1	356 (400-1)		NA
RNP 0.17 DA	4258-1¼	394 (400-1¼)		NA
RNP 0.30 DA	4353-1½	489 (500-1½)		NA

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

REIL Rwy 9 (L)
MIRL Rwys 5-23 and 16-34 (L)
HIRL Rwy 9-27 (L)

NW-1. 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	9000
267°	TDZE	3852
	Apt Elev	3877

RNAV (RNP) Z RWY 27

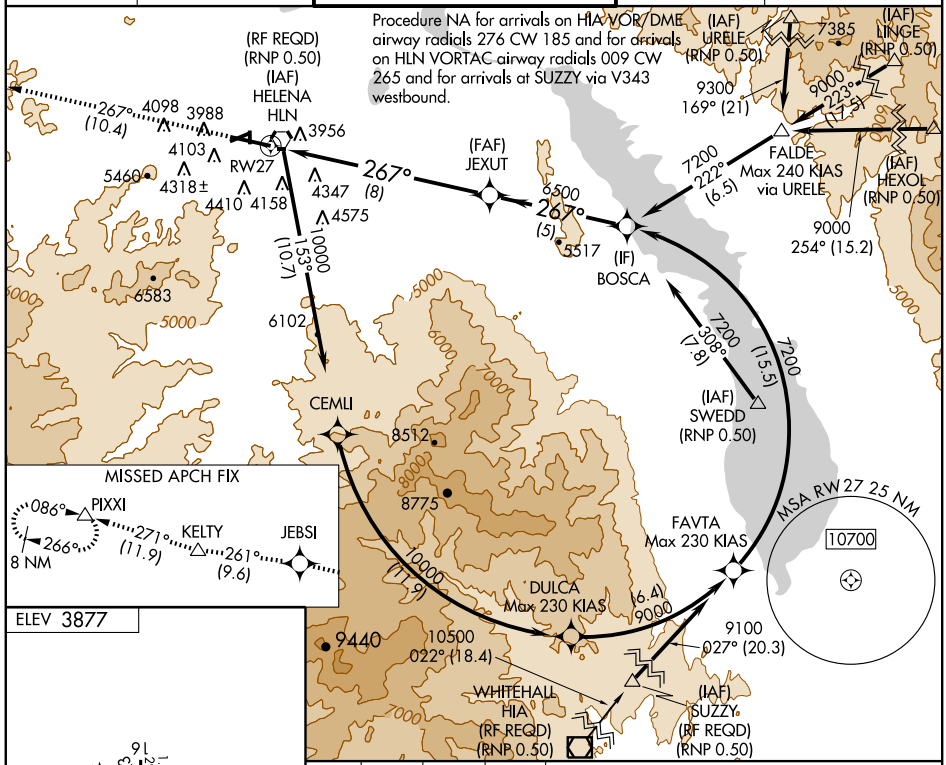
HELENA RGNL (HLN)

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 41°C (105°F). *Missed approach requires minimum climb of 295 feet per NM to 7900. **Missed approach requires minimum climb of 290 feet per NM to 7300. ***Missed approach requires minimum climb of 405 feet per NM to 6300. For inoperative MALSR, increase RNP 0.18* visibility to 1, RNP 0.22** visibility to 1¼, and RNP 0.30*** visibility to 1½. Inoperative table does not apply to RNP 0.30.

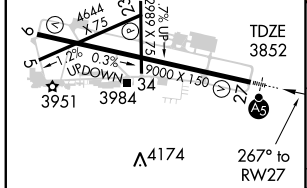
MALSR

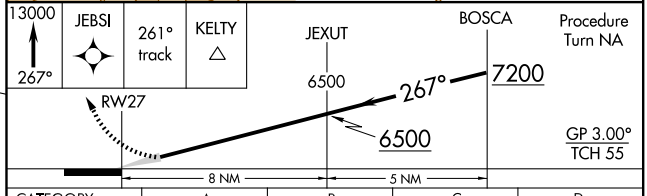
MISSED APPROACH: Climb to 13000 via 267° track to JEBSI, and via 261° track to KELTY, and via 271° track to PIXXI and hold, continue climb-in-hold to 13000.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95



ELEV 3877





CATEGORY	A	B	C	D
RNP 0.18 DA*	4119-½ 267 (300-½)			
RNP 0.22 DA**	4212-¾ 360 (400-¾)			
RNP 0.30 DA***	4287-1 435 (500-1)			
RNP 0.30 DA	4863-4 1011 (1000-4)			

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

NW-1. 08 APR 2010 to 06 MAY 2010

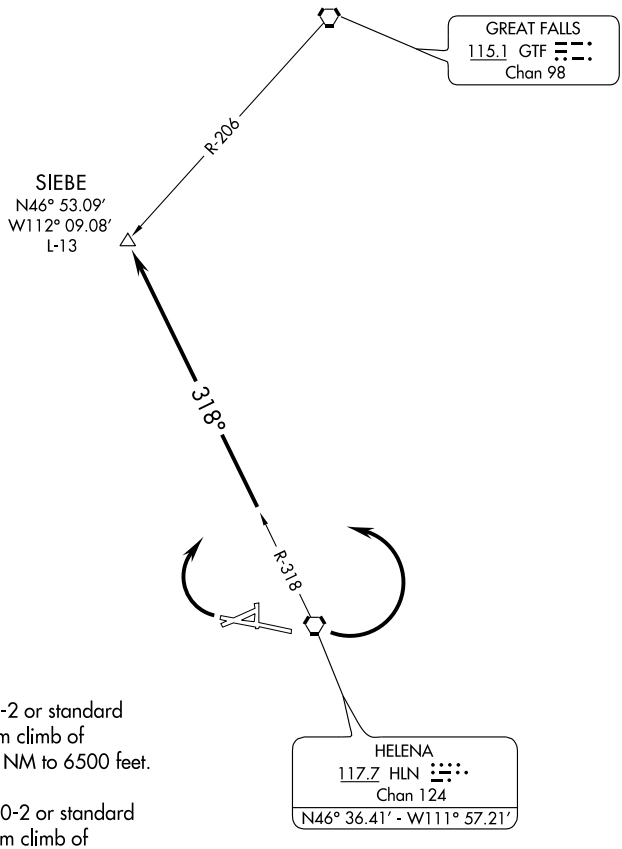
(SIEBE2.SIEBE) 10098

SIEBE TWO DEPARTURE

SL-192 (FAA)

HELENA RGNL (HLN)
HELENA, MONTANA

ATIS 120.4
GND CON
121.9
HELENA TOWER★
118.3 (CTAF) 257.8
HELENA DEP CON★
119.5 229.4



NOTE: Rwy 9, 1500-2 or standard with minimum climb of 360 feet per NM to 6500 feet.

NOTE: Rwy 27, 2400-2 or standard with minumum climb of 355 feet per NM to 7100 feet.

NOTE: Chart not to scale.

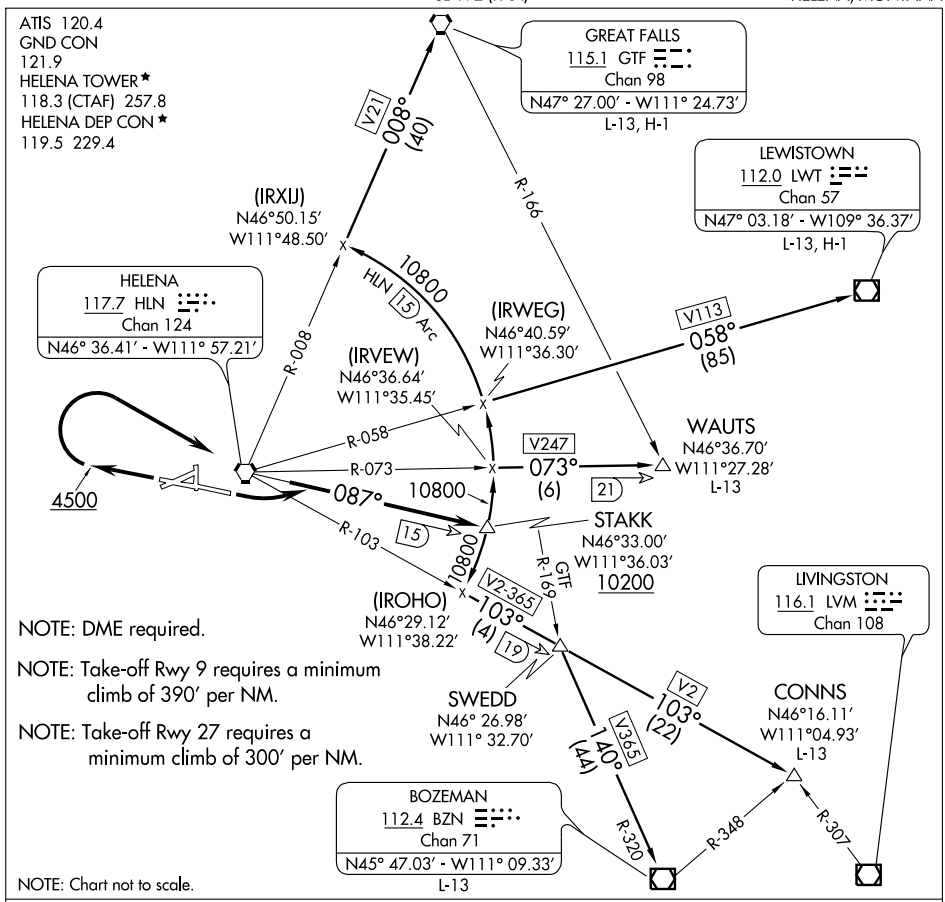
T

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climbing left turn, thence. . . .

TAKE-OFF RUNWAY 27: Climbing right turn, thence. . . .

. . . .Intercept HLN R-318 to SIEBE INT.



NW-1. 08 APR 2010 to 06 MAY 2010

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climbing left turn to intercept HLN R-087 to cross STAKK INT at or above 10200′. Thence via transition.

TAKE-OFF RUNWAY 27: Climb on runway heading to 4500′ then climbing right turn direct HLN VORTAC. Continue climb on HLN R-087 to cross STAKK INT at or above 10200′. Thence via transition.

BOZEMAN TRANSITION (STAKK2.BZN): From over STAKK INT via 15 DME Arc and V365 to BZN VOR/DME.

CONNS TRANSITION (STAKK2.CONNS): From over STAKK INT via 15 DME Arc and V2 to CONNS INT.

GREAT FALLS TRANSITION (STAKK2.GTF): From over STAKK INT via 15 DME Arc and V21 to GTF VORTAC.

LEWISTOWN TRANSITION (STAKK2.LWT): From over STAKK INT via 15 DME Arc and V113 to LWT VORTAC.

WAUTS TRANSITION (STAKK2.WAUTS): From over STAKK INT via 15 DME Arc and V247 to WAUTS INT.

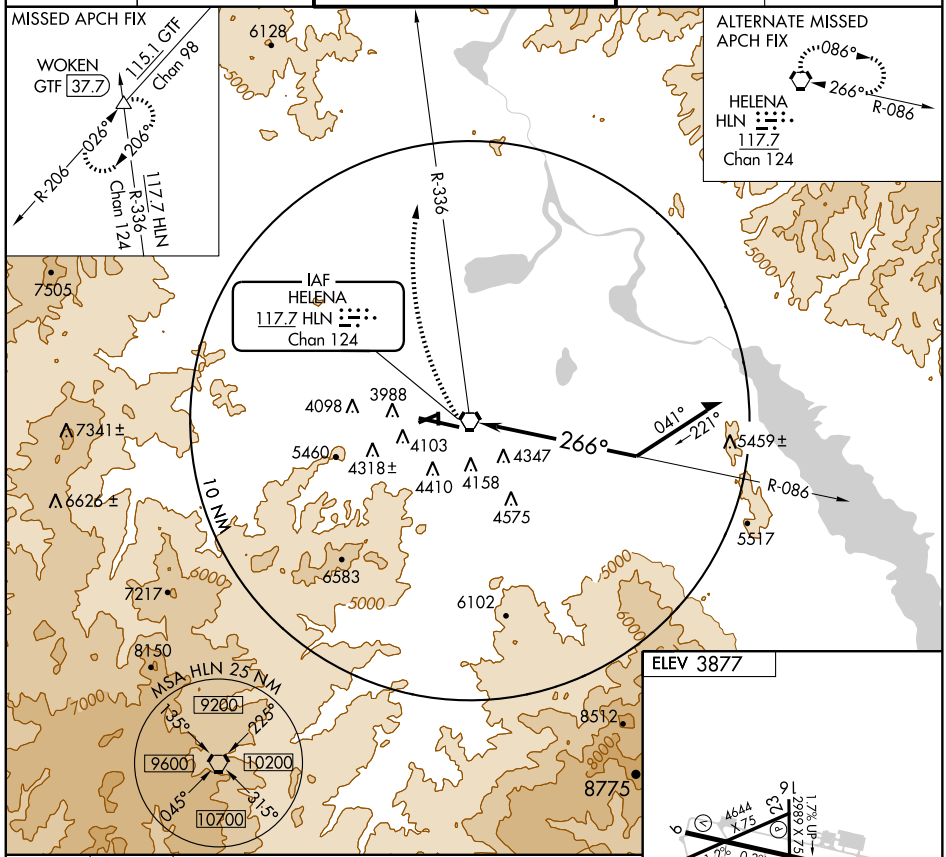
VORTAC HLN 117.7 Chan 124	APP CRS 266°	Rwy ldg N/A TDZE N/A Apt Elev 3877

VOR-A
HELENA RGNL (HLN)

Circling NA for Cat D south of Rwy 9-27.

MISSED APPROACH: Climbing right turn to 9000 via HLN VORTAC R-336 to WOKEN INT and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95



9000
HLN
R-336

WOKEN

VORTAC

086°

266°

8200

Remain within 10 NM

Procedure Turn: Descend to 10000 in HLN VORTAC holding pattern prior to departing outbound for procedure turn.

CATEGORY	A	B	C	D
CIRCLING	6700-1¼ 2823 (2900-1¼)	6700-1½ 2823 (2900-1½)	6700-3 2823 (2900-3)	

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

NW-1, 08 APR 2010 to 06 MAY 2010

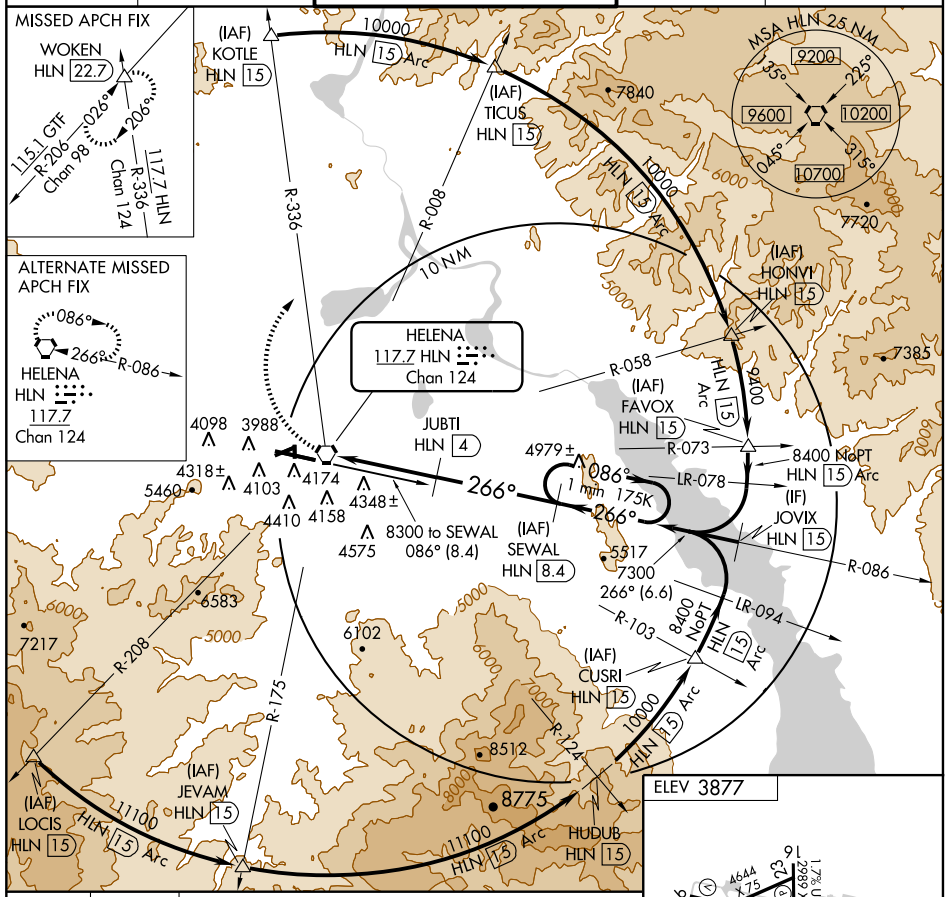
VORTAC HLN 117.7 Chan 124	APP CRS 266°	Rwy ldg N/A TDZE N/A Apt Elev 3877

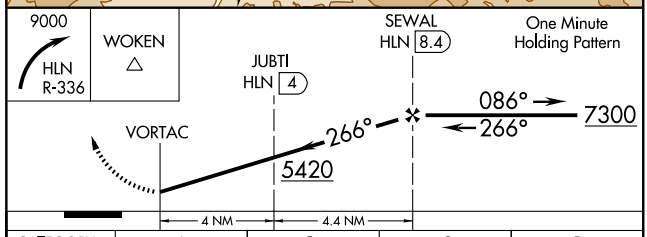
VOR/DME-B
HELENA RGNL (HLN)

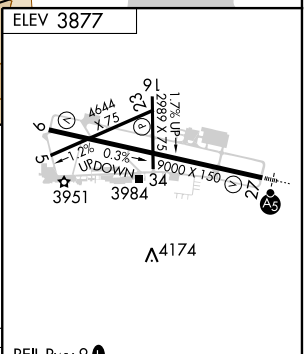
Circling NA for Cat D south of Rwy 9-27.
DME Arc to final approach course required for turbojet aircraft.
Holding at SEWAL authorized for Cat A and B aircraft only.

MISSED APPROACH: Climbing right turn to 9000 via HLN VORTAC R-336 to WOKEN INT/22.7 DME and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
CIRCLING	4760-1¼ 883 (900-1¼)		4760-2¾ 883 (900-2¾)	4760-3 883 (900-3)

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

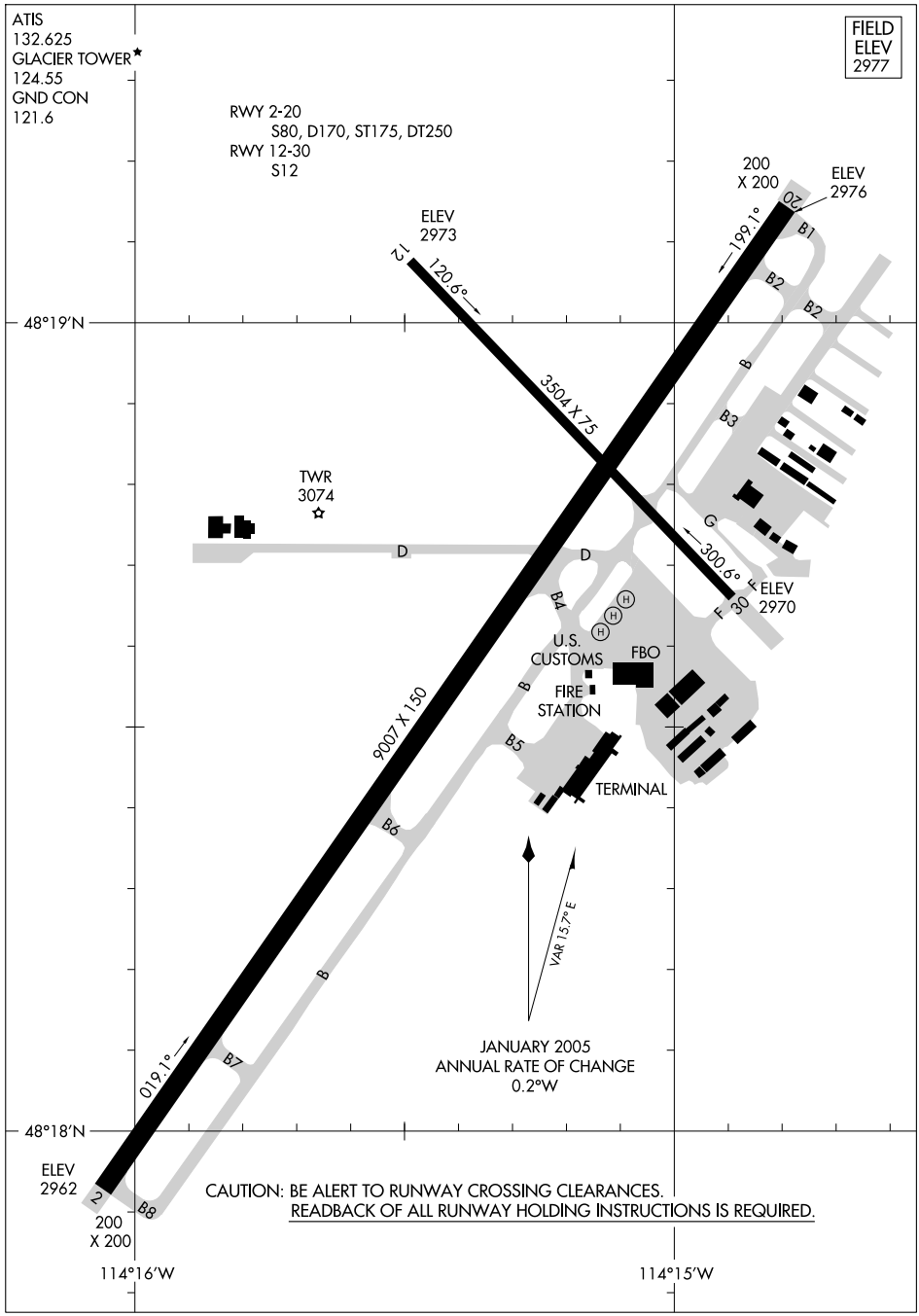
NW-1, 08 APR 2010 to 06 MAY 2010

10098

AIRPORT DIAGRAM

AL-887 (FAA)

KALISPELL/GLACIER PARK INTL (GPI)
KALISPELL, MONTANA



NW-1. 08 APR 2010 to 06 MAY 2010

LOC I-GPI	APP CRS	Rwy ldg	9006
111.5	020°	TDZE	2966
		Apt Elev	2977

ILS or LOC RWY 2

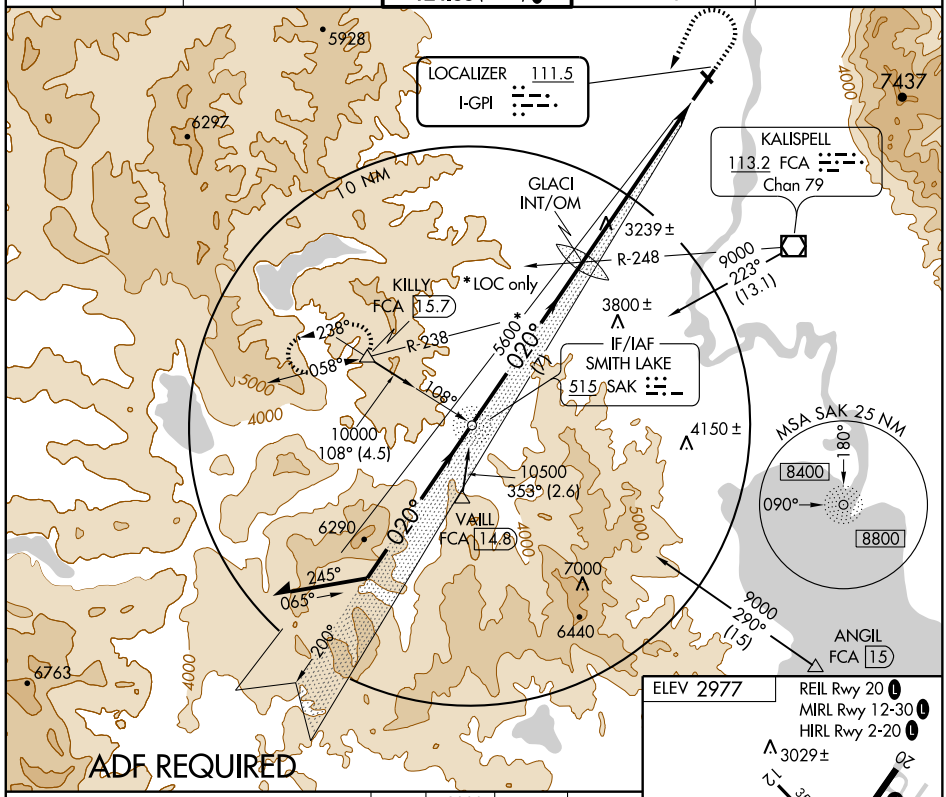
KALISPELL/ GLACIER PARK INTL (GPI)

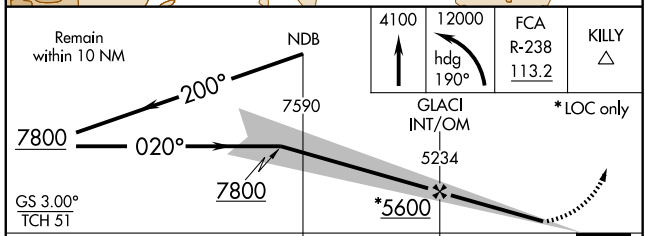
ADF required.

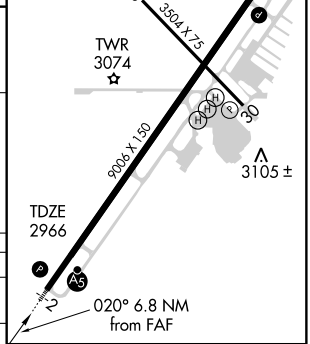
MALSR

MISSED APPROACH: Climb to 4100, then climbing left turn to 12000 via heading 190° and via FCA VOR/DME R-238 to KILLY INT/FCA 15.7 DME and hold, continue climb-in-hold to 12000.

ATIS	SALT LAKE CENTER	GLACIER TOWER*	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95







CATEGORY	A	B	C	D
S-ILS 2	3166-½ 200 (200-½)			
S-LOC 2	3540-½ 574 (600-½)		3540-1 574 (600-1)	3540-1¼ 574 (600-1¼)
CIRCLING	3540-1 563 (600-1)		3640-1¾ 663 (700-1¾)	3640-2 663 (700-2)

FAF to MAP 6.8 NM

Knots	60	90	120	150	180
Min:Sec	6:48	4:32	3:24	2:43	2:16

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	3504
301°	TDZE	2974
	Apt Elev	2977

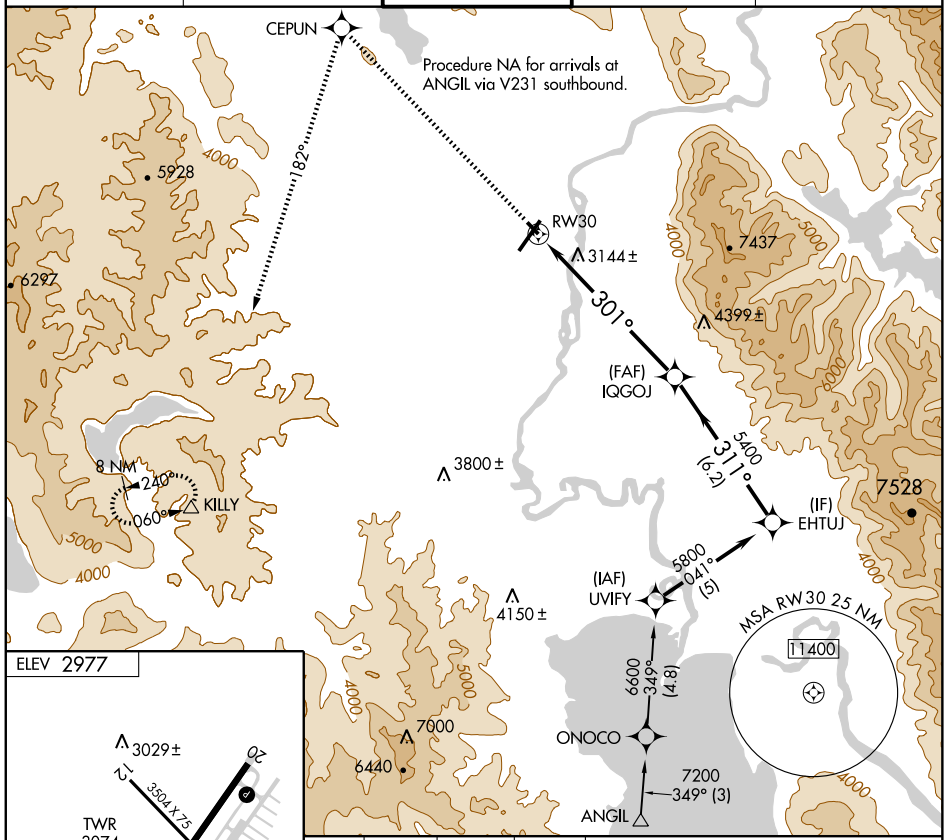
RNAV (GPS) RWY 30

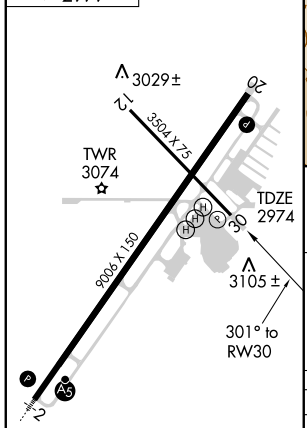
KALISPELL/ GLACIER PARK INTL (GPI)

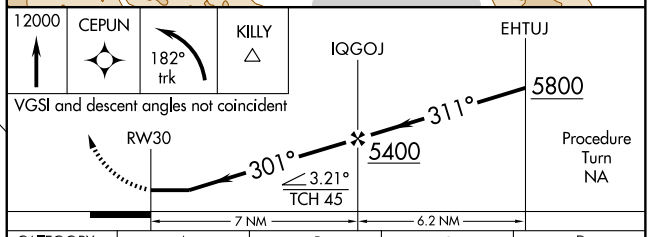
Straight-in minimums NA at night.
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 12000 direct CEPUN and left turn via track 182° to KILLY and hold, continue climb-in-hold to 12000.

ATIS	SALT LAKE CENTER	GLACIER TOWER★	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95







REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 2-20 L

CATEGORY	A	B	C	D
LNAV MDA	3460-1 486 (500-1)		3460-1¼ 486 (500-1¼)	3460-1½ 486 (500-1½)
CIRCLING	3520-1 543 (600-1)		3640-1¾ 663 (700-1¾)	3640-2 663 (700-2)

NW-1. 08 APR 2010 to 06 MAY 2010

WAAS CH 70799 W02A	APP CRS 020°	Rwy ldg 9006 TDZE 2966 Apt Elev 2977

RNAV (GPS) Z RWY 2

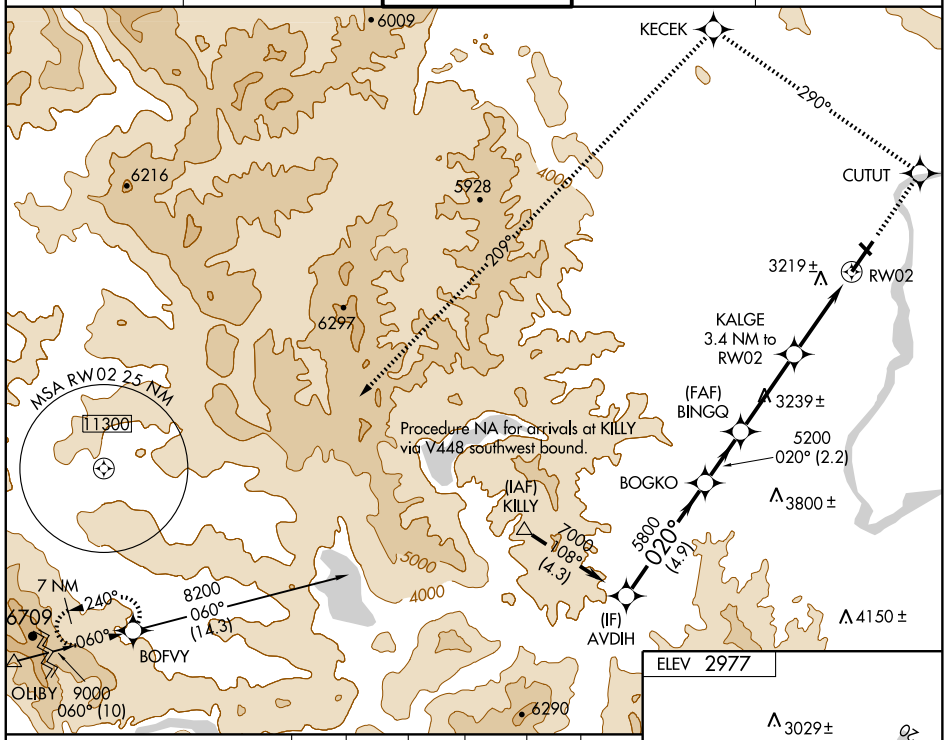
KALISPELL/ GLACIER PARK INTL (GPI)

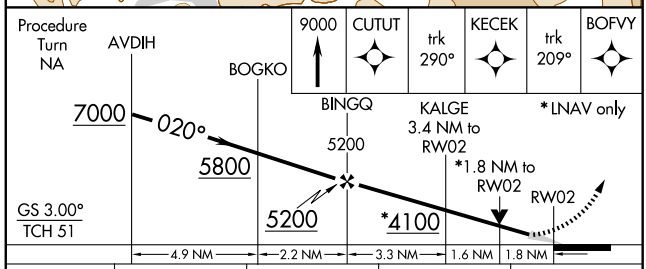
For inoperative MALSR, increase LPV visibility to 1¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (109°F). DME/DME RNP-0.3 NA.

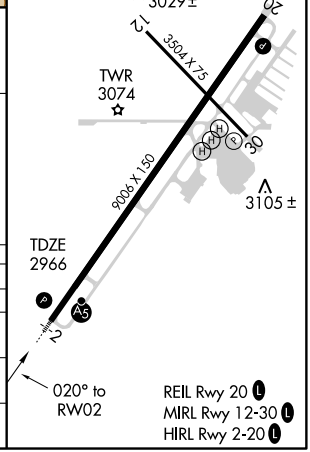
MALSR

MISSED APPROACH: Climb to 9000 direct CUTUT and via track 290° to KECEK and via track 209° to BOFVY and hold.

ATIS	SALT LAKE CENTER	GLACIER TOWER*	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95







CATEGORY	A	B	C	D
LPV DA	3297-¾ 331 (400-¾)			
LNAV/ VNAV DA	3502-1½ 536 (600-1½)			
LNAV MDA	3600-½ 634 (700-½)		3600-1¼ 634 (700-1¼)	3600-1½ 634 (700-1½)
CIRCLING	3600-1 623 (700-1)		3640-1¾ 663 (700-1¾)	3640-2 663 (700-2)

NW-1. 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	9006
200°	TDZE	2977
	Apt Elev	2977

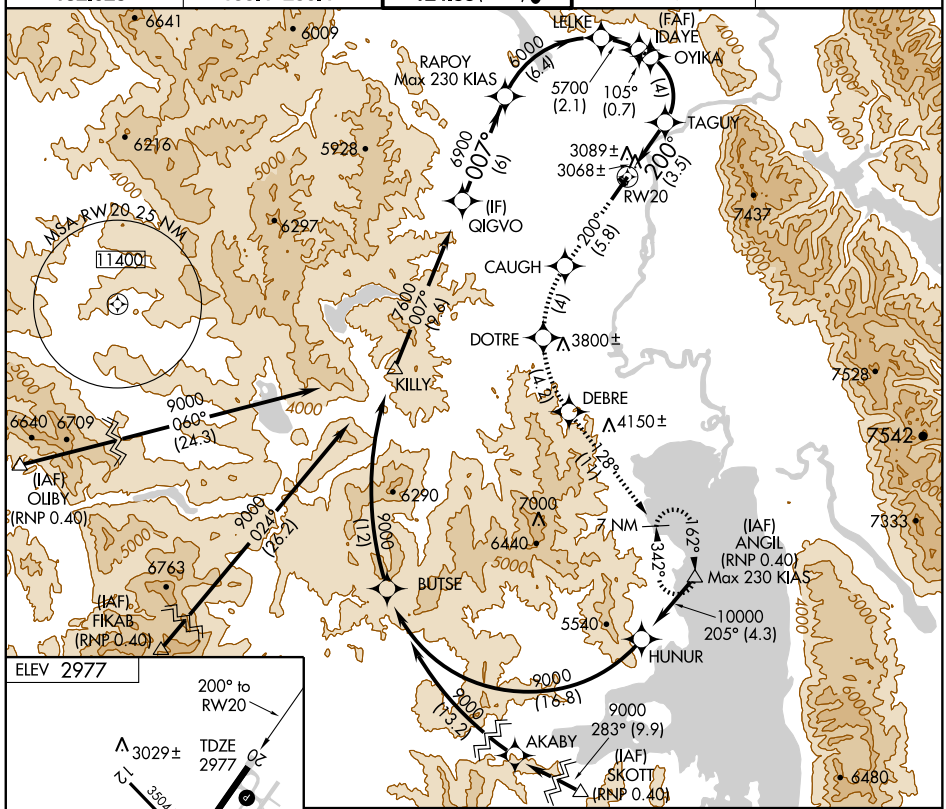
RNAV (RNP) RWY 20

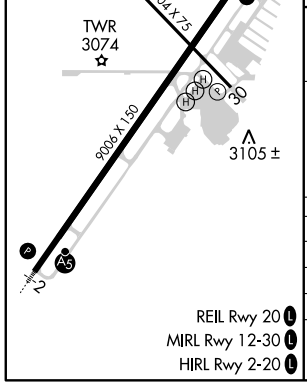
KALISPELL/ GLACIER PARK INTL (GPI)

RF and GPS required. For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F).
*Missed approach requires minimum climb of 235 feet per NM to 6900. Visibility reduction by helicopters NA.

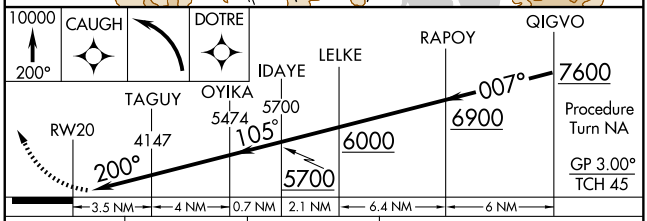
MISSED APPROACH: Climb to 10000 via 200° track to CAUGH and via left turn to DOTRE, and via left turn to DEBRE, and via 128° track to ANGIL and hold, continue climb-in-hold to 10000.

ATIS	SALT LAKE CENTER	GLACIER TOWER*	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95





REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 2-20 L



CATEGORY	A	B	C	D
RNP 0.10 DA*	3344-1¼ 367 (400-1¼)			
RNP 0.30 DA*	3446-1¾ 469 (500-1¾)			
RNP 0.30 DA	3662-2½ 685 (700-2½)			

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

NW-1. 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	9006
020°	TDZE	2966
	Apt Elev	2977

RNAV (RNP) Y RWY 2

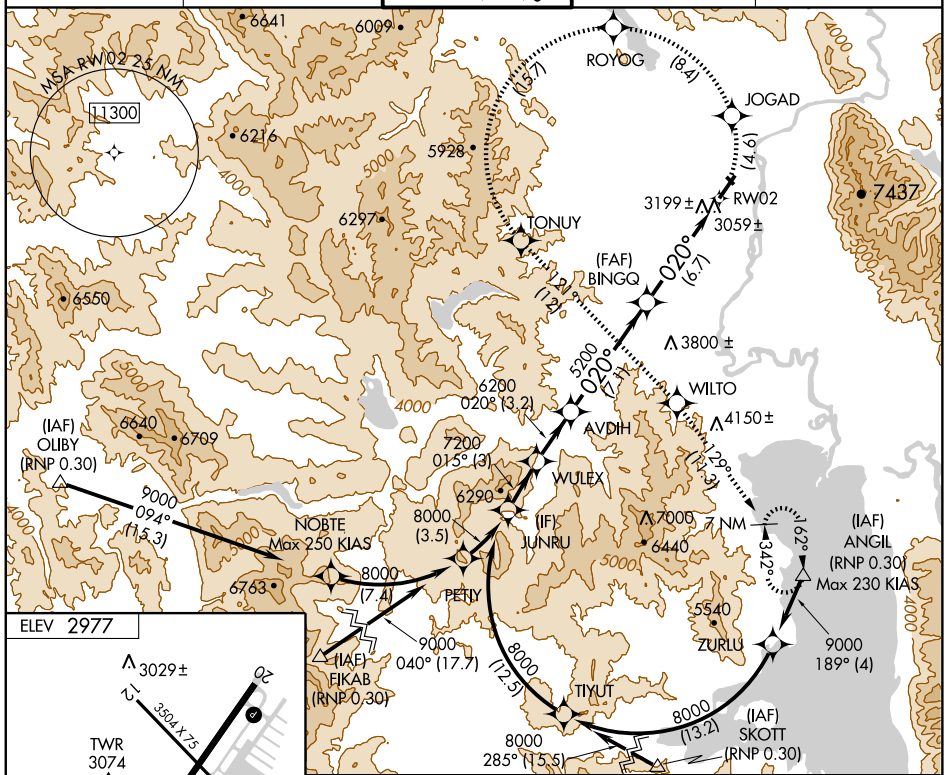
KALISPELL/ GLACIER PARK INTL (GPI)

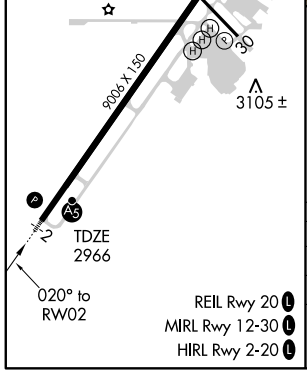
RF and GPS required.
*Missed approach requires minimum climb of 220 feet per NM to 6100.
Missed approach requires RNP less than 1.0.
For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F). For inoperative MALSR increase RNP 0.10* visibility to 1¼ and RNP 0.30 visibility to 2.

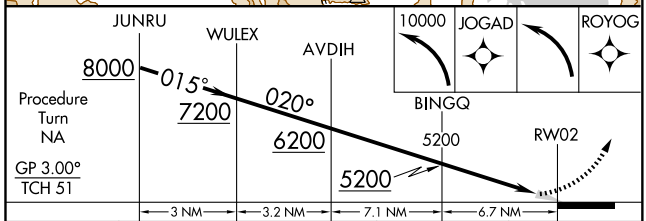
MALSR

MISSED APPROACH: Climb to 10000 via left turn to JOGAD, and via left turn to ROYOG and via left turn to TONUY, and via 121° track to WILTO and via 129° track to ANGIL and hold.

ATIS	SALT LAKE CENTER	GLACIER TOWER *	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95





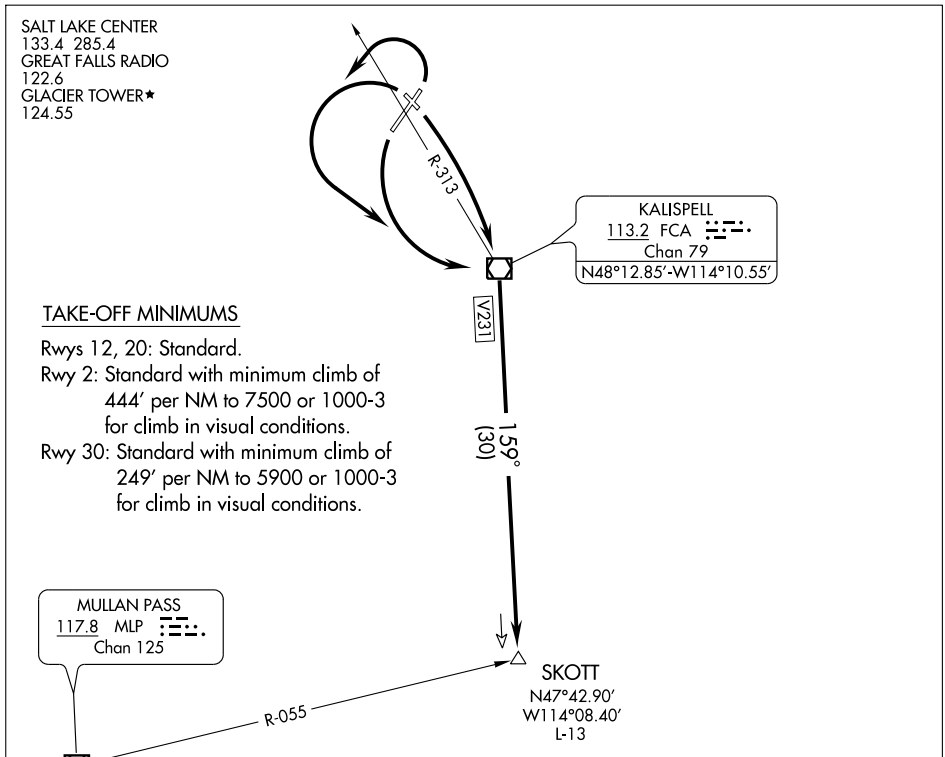


CATEGORY	A	B	C	D
RNP 0.10 DA*	NA	3340-¾ 374 (400-¾)		
RNP 0.30 DA	NA	3522-1½ 556 (600-1½)		

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

NW-1. 08 APR 2010 to 06 MAY 2010

SKOTT ONE DEPARTURE (OBSTACLE)



TAKE-OFF MINIMUMS

Rwys 12, 20: Standard.
Rwy 2: Standard with minimum climb of 444′ per NM to 7500 or 1000-3 for climb in visual conditions.
Rwy 30: Standard with minimum climb of 249′ per NM to 5900 or 1000-3 for climb in visual conditions.

TAKE-OFF OBSTACLE NOTES

Rwy 2: Multiple trees beginning 1468′ from DER, 674′ right of centerline, up to 91′ AGL/3061′ MSL.
Rwy 12: Multiple trees beginning 1426′ from DER, 543′ left of centerline, up to 129′ AGL/3082′ MSL.
Railroad 702′ from DER, 317′ left of centerline, 31′ AGL/2997′ MSL.
Road 544′ from DER, 299′ left of centerline, 22′ AGL/2988′ MSL.
Rwy 20: Multiple trees beginning 2742′ from DER, 1140′ left of centerline, up to 107′ AGL/3169′ MSL.
Rwy 30: Multiple trees beginning 1848′ from DER, 722′ left of centerline, up to 104′ AGL/3067′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 2: Climbing left turn direct FCA VOR/DME, thence.... or, climb in visual conditions to cross Glacier Park Intl Airport southeast bound at or above 3800, then via FCA R-313 to FCA VOR/DME, thence....

TAKE-OFF RUNWAY 30: Climbing left turn direct FCA VOR/DME, thence.... or, climb in visual conditions to cross Glacier Park Intl Airport southeast bound at or above 3800, then via FCA R-313 to FCA VOR/DME, thence....

TAKE-OFF RUNWAY 12: Climbing right turn direct FCA VOR/DME, thence....

TAKE-OFF RUNWAY 20: Climbing left turn direct FCA VOR/DME, thence....

....continue climb to 10,000 via FCA R-159 to SKOTT INT.

VOR/DME FCA 113.2 Chan 79	APP CRS 316°	Rwy ldg 3504 TDZE 2974 Apt Elev 2977

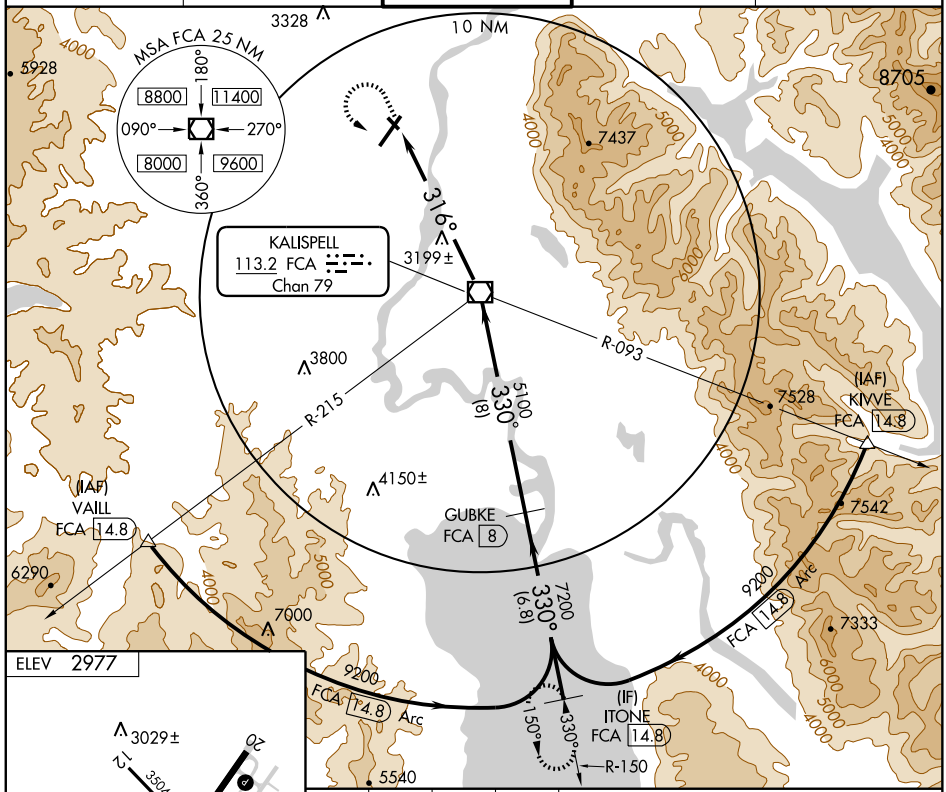
VOR/DME RWY 30

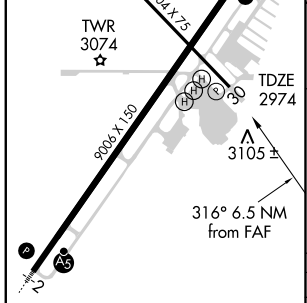
KALISPELL/ GLACIER PARK INTL (GPI)

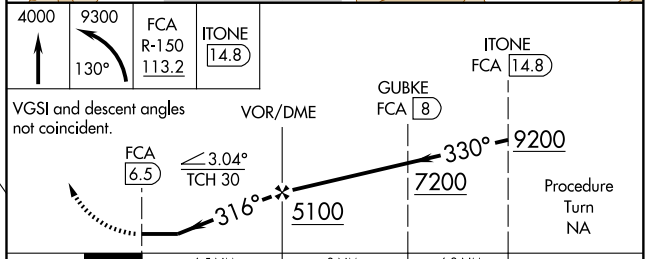
Visibility reduction by helicopters not authorized. When VGSI inoperative, straight-in minimums not authorized at night.

MISSED APPROACH: Climb to 4000 then climbing left turn to 9300 via heading 130° and FCA R-150 to ITONE/14.8 DME and hold, continue climb-in-hold to 9300.

ATIS	SALT LAKE CENTER	GLACIER TOWER★	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95







CATEGORY	A	B	C	D
S-30	3480-1 506 (600-1)		3480-1½ 506 (600-1½)	
CIRCLING	3520-1 543 (600-1)		3640-1¾ 663 (700-1¾)	3640-2 663 (700-2)

REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 2-20 L

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	5200
036°	TDZE	3488
	Apt Elev	3517

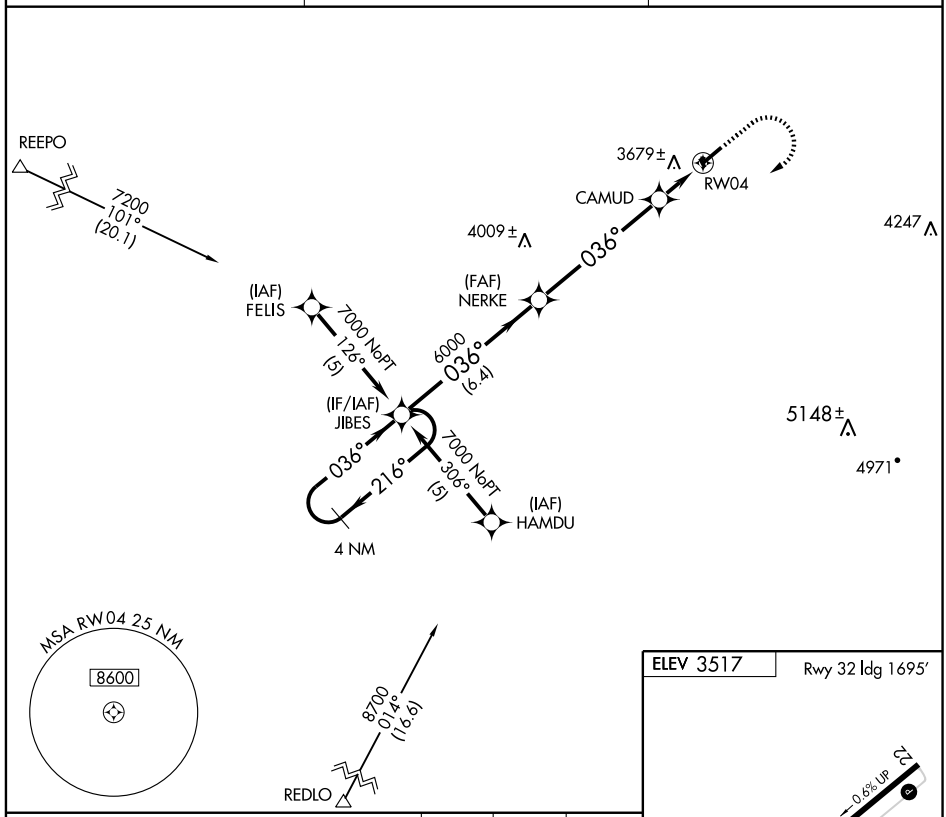
RNAV (GPS) RWY 4
LAUREL MUNI (6S8)

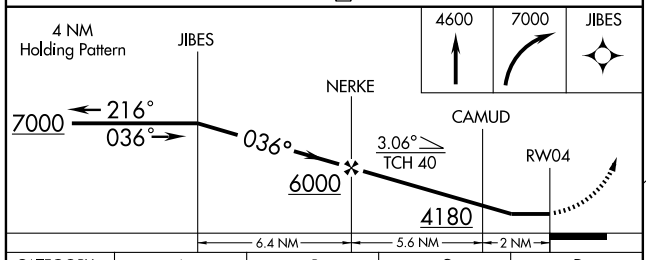
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Use Billings altimeter setting.

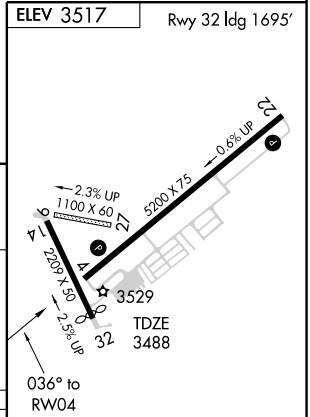
NA

MISSED APPROACH: Climb to 4600 then climbing right turn to 7000 direct JIBES WP and hold.

AWOS-3	BILLINGS APP CON	UNICOM
123.05	119.2 120.5 284.6	123.05 (CTAF) L







CATEGORY	A	B	C	D
LNAV	4120-1 632 (700-1)		4120-1¾ 632 (700-1¾)	4120-2 632 (700-2)
CIRCLING	4220-1 703 (800-1)		4220-2 703 (800-2)	4340-2¾ 823 (900-2¾)

NW-1. 08 APR 2010 to 06 MAY 2010

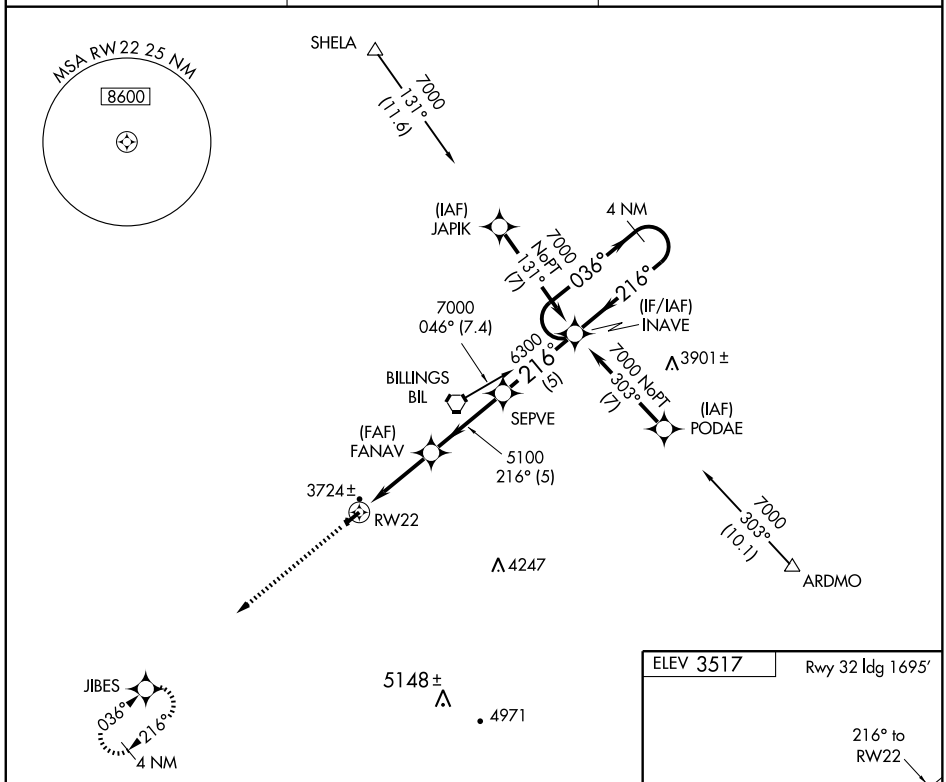
APP CRS	Rwy ldg	5200
216°	TDZE	3472
	Apt Elev	3517

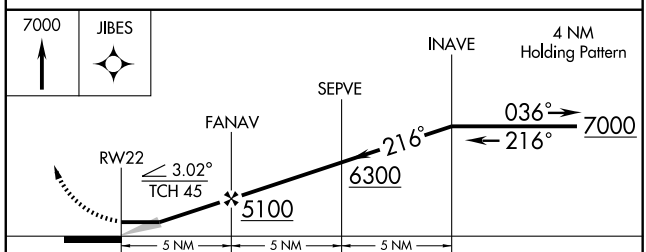
RNAV (GPS) RWY 22
LAUREL MUNI (6S8)

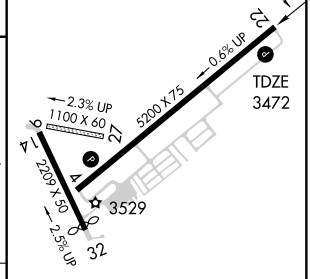
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA Use Billings altimeter setting.

MISSED APPROACH: Climb to 7000 direct JIBES WP and hold.

AWOS-3	BILLINGS APP CON	UNICOM
123.05	119.2 120.5 284.6	123.05 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4100-1 628 (600-1)		4100-1¾ 628 (600-1¾)	4100-2 628 (600-2)
CIRCLING	4220-1 703 (800-1)		4220-2 703 (800-2)	4340-2¾ 823 (900-2¾)

MIRL Rwy 4-22 L

NW-1. 08 APR 2010 to 06 MAY 2010

VORTAC BIL 114.5 Chan 92	APP CRS 208°	Rwy ldg 5200 TDZE 3472 Apt Elev 3517

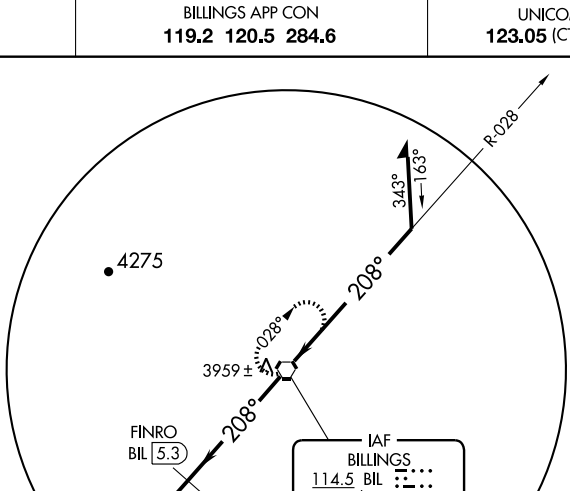
VOR RWY 22
LAUREL MUNI (6S8)

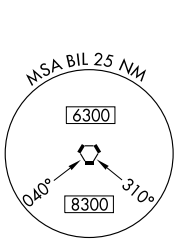
NA

Use Billings altimeter setting.

MISSED APPROACH: Climb to 4700 then climbing left turn to 6300 direct BIL VORTAC and hold.

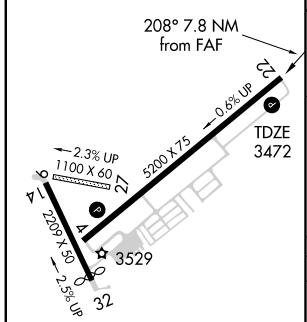
AWOS-3	BILLINGS APP CON	UNICOM
123.05	119.2 120.5 284.6	123.05 (CTAF) L





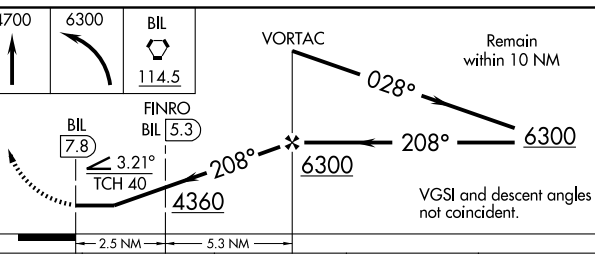
ELEV 3517

Rwy 32 ldg 1695'



MIRL Rwy 4-22 L

FAF to MAP 7.8 NM					
Knots	60	90	120	150	180
Min:Sec	7:48	5:12	3:54	3:07	2:36



CATEGORY	A	B	C	D
S-22	4360-1¼ 888 (900-1¼)		4360-2¾ 888 (900-2¾)	4360-3 888 (900-3)
CIRCLING	4360-1¼ 843 (900-1¼)		4360-2¾ 843 (900-2¾)	4360-3 843 (900-3)
FINRO FIX MINIMUMS				
S-22	4160-1 688 (700-1)		4160-2 688 (700-2)	4160-2¼ 688 (700-2¼)
CIRCLING	4220-1 703 (800-1)		4220-2 703 (800-2)	4340-2¾ 823 (900-2¾)

NW-1, 08 APR 2010 to 06 MAY 2010

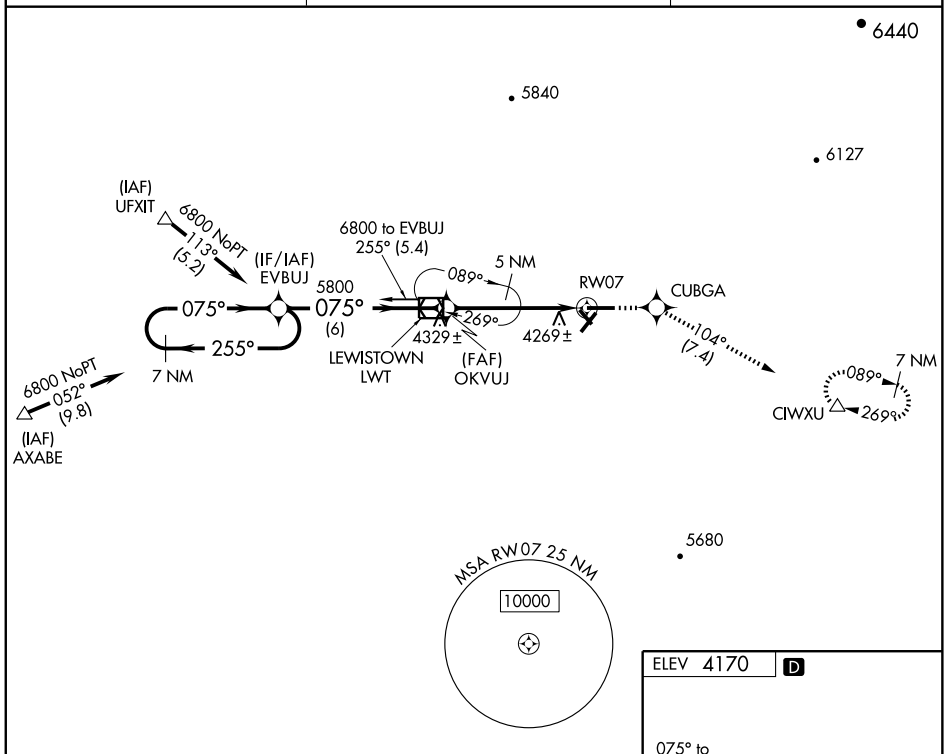
WAAS CH 86700 W07A	APP CRS 075°	Rwy ldg 6100 TDZE 4129 Apt Elev 4170

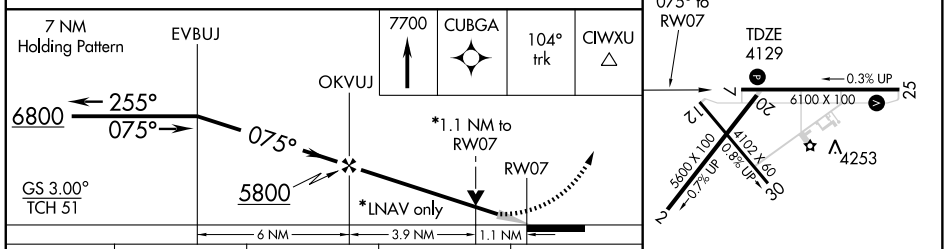
RNAV (GPS) RWY 7
LEWISTOWN MUNI (LWT)

DME/DME RNP -0.3 NA.
If local altimeter setting not received, procedure NA.
Baro-VNAV NA below -23°C (-9°F)

MISSED APPROACH: Climb to 7700 direct CUBGA and via 104° track to CIWXU and hold, continue climb-in-hold to 7700.

ASOS	GREAT FALLS RADIO	UNICOM
118.375	122.2	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	4379-¾ 250 (300-¾)			
LNAV/VNAV DA	4636-1¾ 507 (500-1¾)			
LNAV MDA	4520-1 391 (400-1)			4520-1¼ 391 (400-1¼)
CIRCLING	4680-1¾ 510 (600-1¾)		4780-1¾ 610 (700-1¾)	4860-2¼ 690 (700-2¼)

REIL Rwys 7 and 25 L
MIRL Rwys 2-20, 7-25 and 12-30 L

NW-1, 08 APR 2010 to 06 MAY 2010

VOR/DME LWT	APP CRS	Rwy ldg 6100
112.0	075°	TDZE 4126
Chan 57		Apt Elev 4167

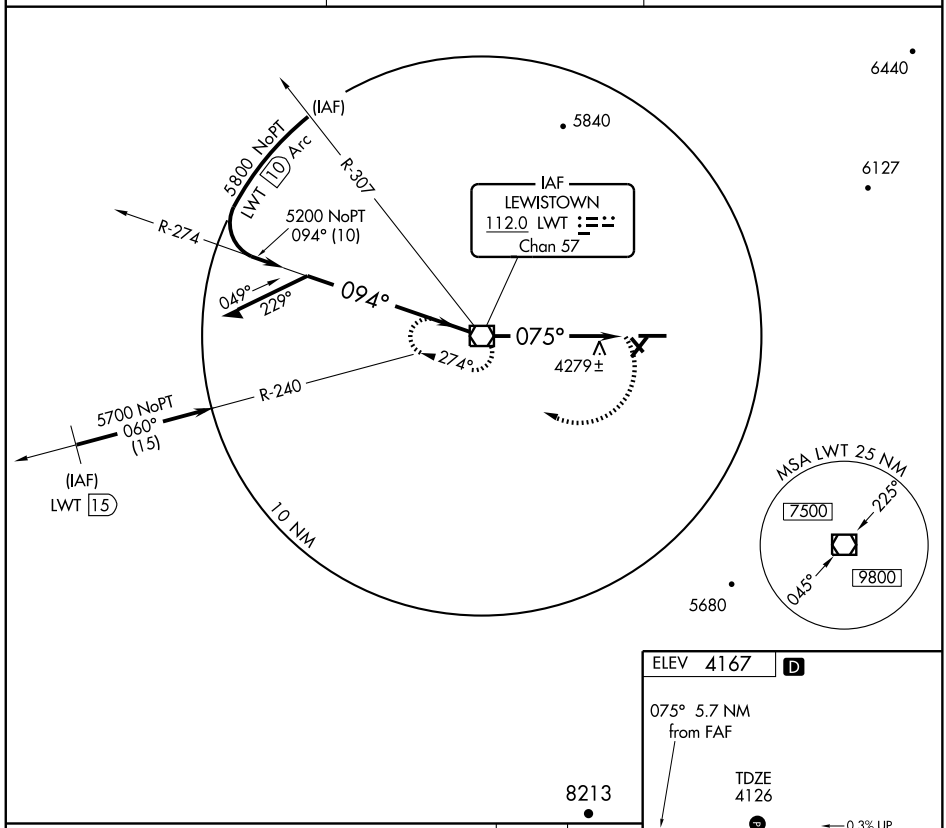
VOR RWY 7

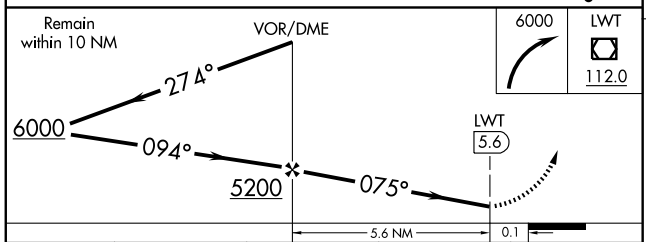
LEWISTOWN MUNI (LWT)

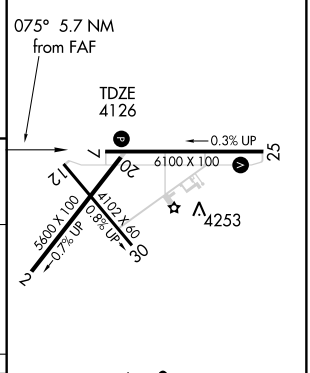
If local altimeter setting not received, procedure not authorized.

MISSED APPROACH: Climbing right turn to 6000 direct LWT VOR/DME and hold.

ASOS	GREAT FALLS RADIO	UNICOM
118.375	122.2	123.0 (CTAF) L







REIL Rwys 7 and 25 L
MIRL Rwys 2-20, 7-25 and 12-30 L

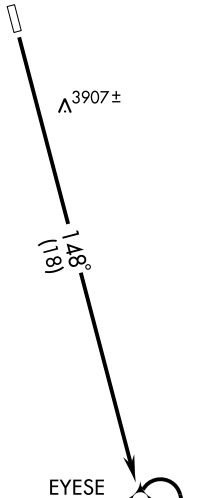
CATEGORY	A	B	C	D
S-7	4600-1	474 (500-1)	4600-1¼ 474 (500-1¼)	4600-1½ 474 (500-1½)
CIRCLING	4660-1	493 (500-1)	4660-1½ 493 (500-1½)	4880-2¼ 713 (800-2¼)

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

NW-1, 08 APR 2010 to 06 MAY 2010

EYESE ONE DEPARTURE (RNAV) (OBSTACLE)

SEATTLE CENTER
123.95 282.3
AWOS-A
118.575



NOTE: 1. GPS Required.
2. RNAV 1

TAKE-OFF MINIMUMS: 1400-2 or standard with a minimum climb of 380′ per NM to 9600′.
3907′ terrain 23,697′ from runway threshold, 2491′ left of centerline.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 15: Climb via 148° course to 9600′ to EYESE WP, then continue climb to 12,000′ within the EYESE holding pattern.

APP CRS	Rwy ldg	N/A
148°	TDZE	N/A
	Apt Elev	2601

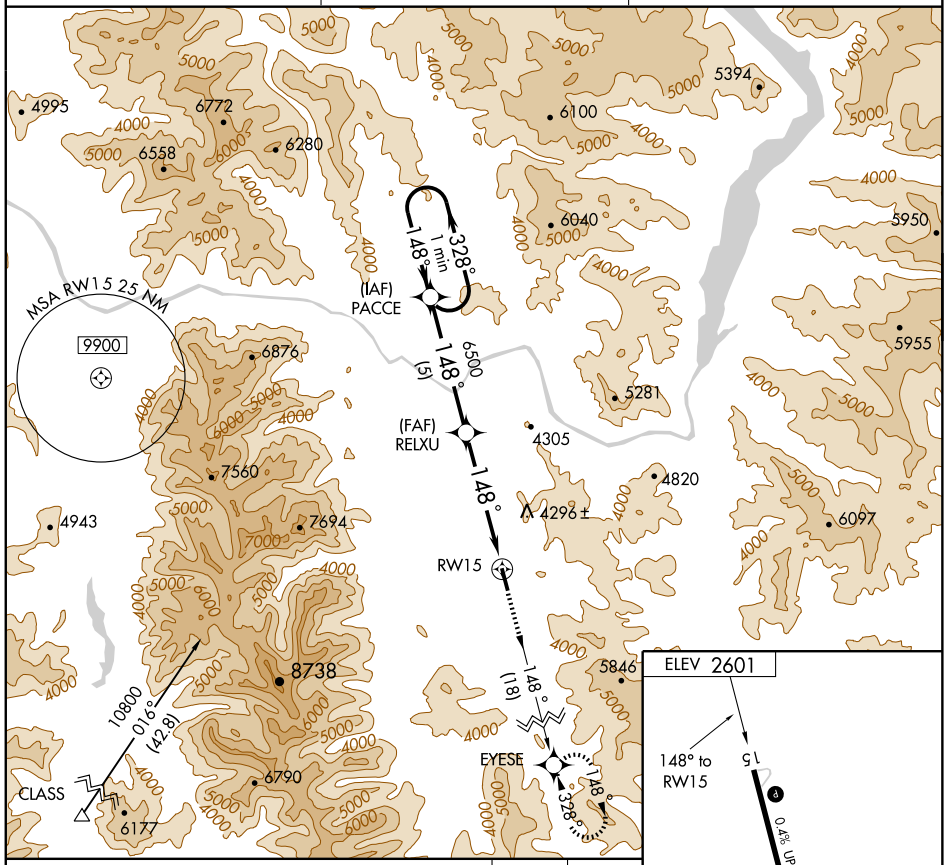
GPS-A
LIBBY (S59)

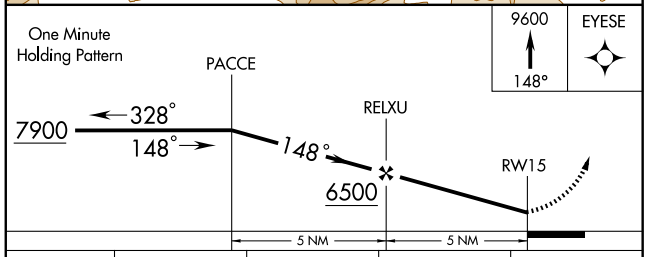
Obtain local altimeter setting on CTAF; when not received procedure not authorized.
Circling not authorized east of Rwys 15-33 at night.

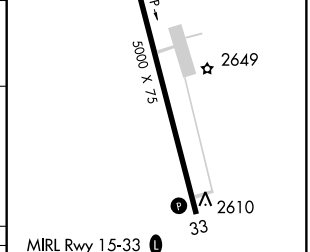
NA

MISSED APPROACH: Climb to 9600 via 148° course to EYESE WP and hold.

AWOS-A	SEATTLE CENTER	UNICOM
118.575	123.95 282.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	5100-1¼ 2499 (2500-1¼)	5100-1½ 2499 (2500-1½)	NA	

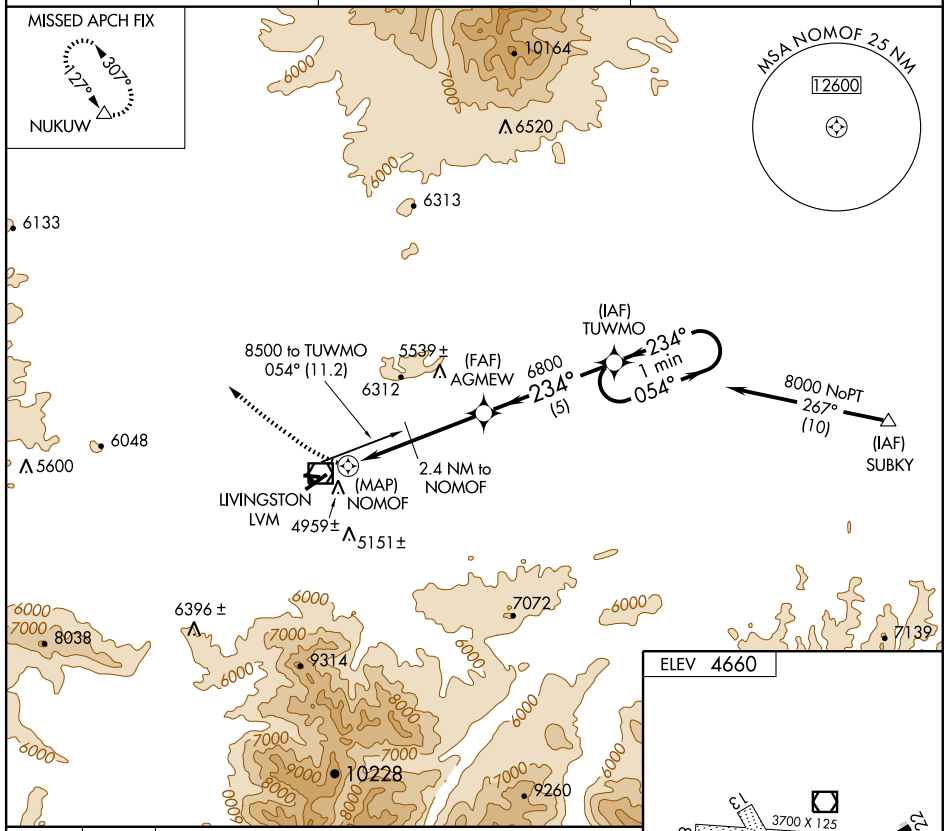
APP CRS	Rwy ldg	5701
234°	TDZE	4649
	Apt Elev	4660

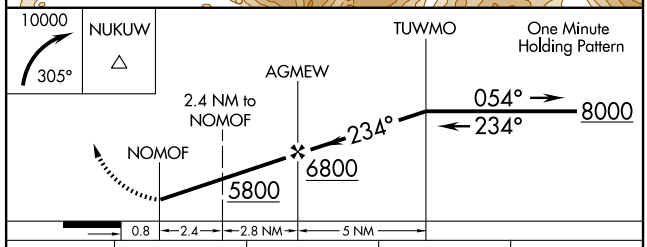
GPS RWY 22
LIVINGSTON/MISSION FIELD (LVM)

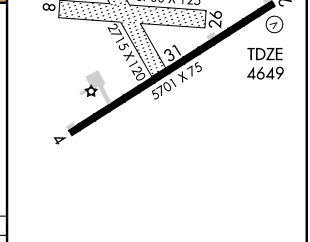
NA

MISSED APPROACH: Climbing right turn to 10000 via 305° course to NUKUW WP and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.275	122.2	123.0 (CTAF)





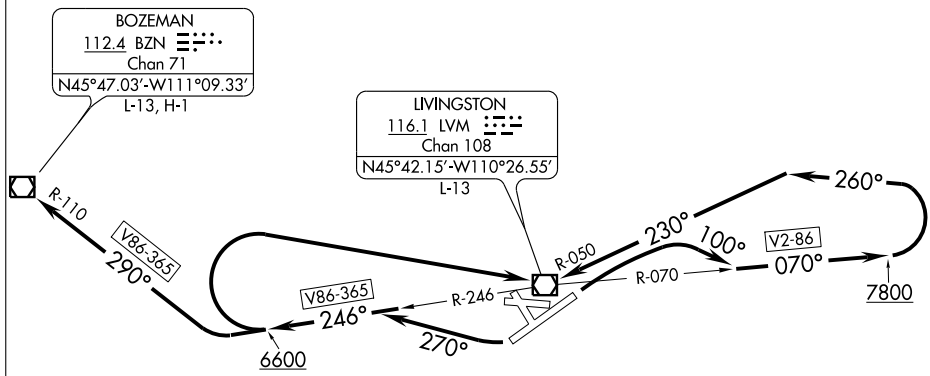


CATEGORY	A	B	C	D
S-22	5080-1 431 (500-1)		5080-1¼ 431 (500-1¼)	5080-1½ 431 (500-1½)
CIRCLING	5360-1 700 (700-1)	5380-1 720 (800-1)	5380-2 720 (800-2)	5580-3 920 (1000-3)

REIL Rwy 22
MIRL Rwy 4-22

LIVINGSTON ONE DEPARTURE (OBSTACLE)

GREAT FALLS RADIO
122.2
ASOS 135.275



TAKE-OFF MINIMUMS

Rwys 8, 13, 26, 31: NA-Environmental.
Rwy 4: Standard.
Rwy 22: Standard with minimum climb of 300' per NM to 6800 or 2700-3 for climb in visual conditions.

TAKE-OFF OBSTACLE NOTE

Rwy 22: Multiple trees beginning 400' from DER, 256' right of centerline, up to 100' AGL/4719' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 4: Climbing right turn heading 100° and LVM VOR/DME R-070 outbound; aircraft departing eastbound, climb via LVM R-070/V2-86 enroute. All others continue climb on LVM R-070 to 7800, then climbing left turn via heading 260° and LVM R-050 to cross LVM VOR/DME at or above 9000, then climb enroute.

TAKE-OFF RUNWAY 22: Climbing right turn heading 270° and LVM VOR/DME R-246 outbound; aircraft departing eastbound, continue climb via LVM R-246 outbound to 6600, then climbing right turn direct LVM VOR/DME, then climb on LVM R-070/V2-86 enroute. All other aircraft continue climb via LVM VOR/DME R-246 and BZN VOR/DME R-110 to BZN. For climb in visual conditions, cross LVM VOR/DME at or above 9000 before proceeding via filed airway route.

NW-1. 08 APR 2010 to 06 MAY 2010

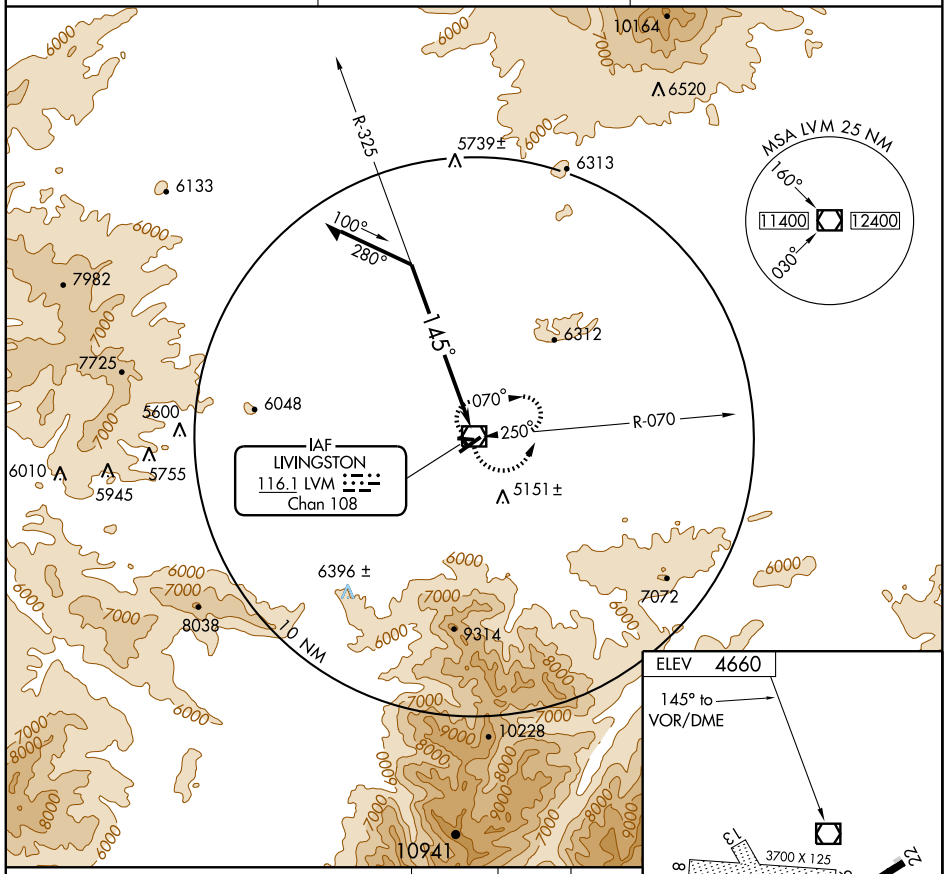
VOR/DME LVM 116.1 Chan 108	APP CRS 145°	Rwy ldg N/A TDZE N/A Apt Elev 4660

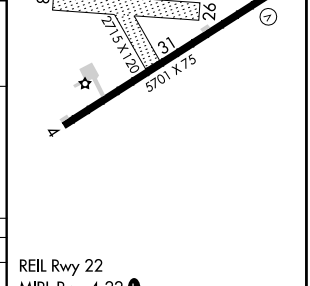
VOR-A

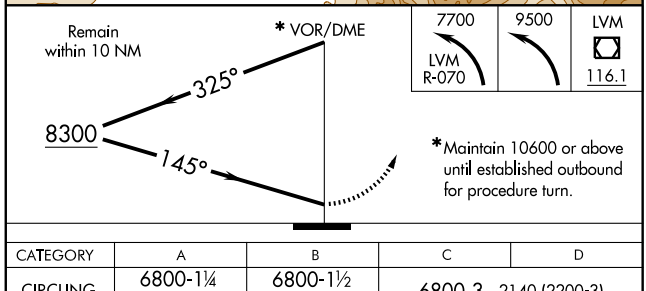
LIVINGSTON/ MISSION FIELD (LVM)

MISSED APPROACH: Climbing left turn to 7700 via LVM R-070, then climbing left turn to 9500 direct LVM VOR/DME and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.275	122.2	123.0 (CTAF) L







*Maintain 10600 or above until established outbound for procedure turn.

CATEGORY	A	B	C	D
CIRCLING	6800-1¼ 2140 (2200-1¼)	6800-1½ 2140 (2200-1½)	6800-3 2140 (2200-3)	

REIL Rwy 22
MIRL Rwy 4-22 L

VOR/DME LVM 116.1 Chan 108	APP CRS 145°	Rwy ldg N/A TDZE N/A Apt Elev 4660

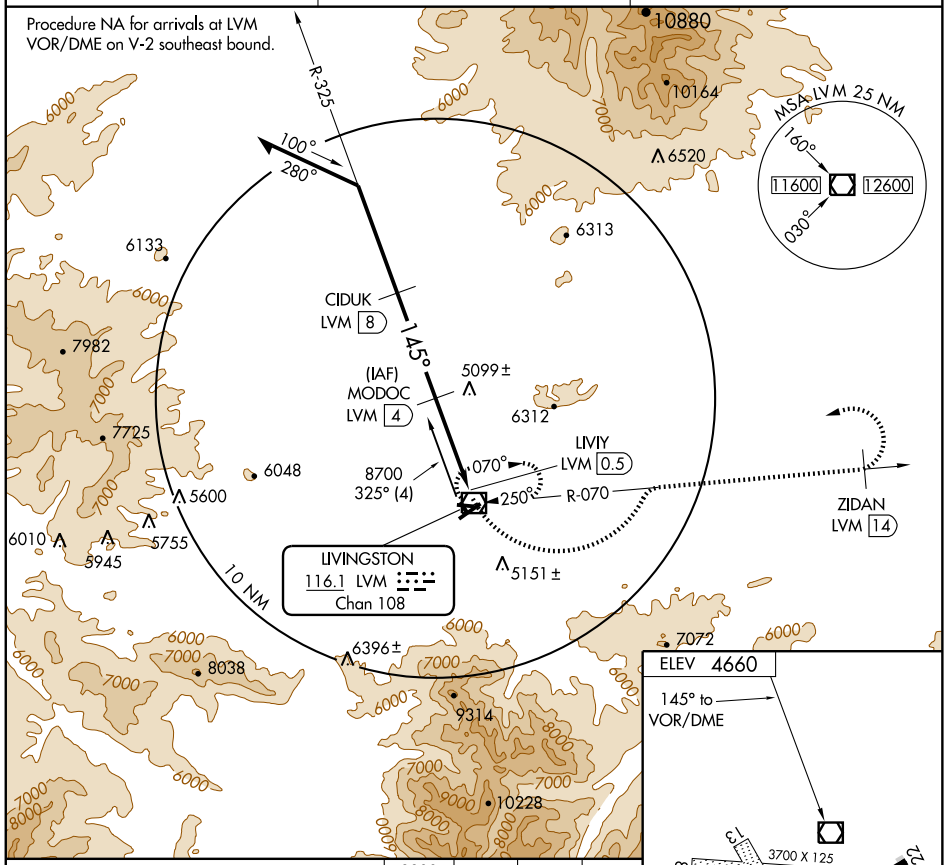
VOR/DME-B

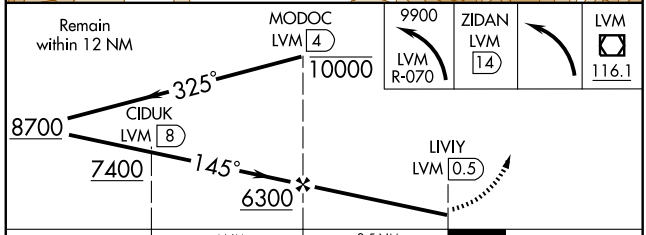
LIVINGSTON/ MISSION FIELD (LVM)

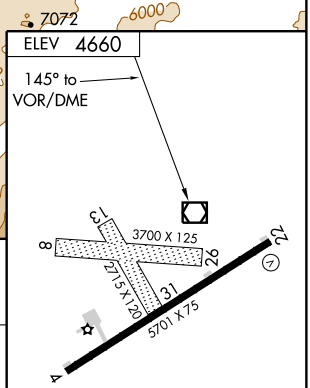
MISSED APPROACH: Climbing left turn to 9900 via LVM VOR/DME R-070 to ZIDAN/14 DME and left turn direct LVM VOR/DME and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.275	122.2	123.0 (CTAF) L

Procedure NA for arrivals at LVM VOR/DME on V-2 southeast bound.







CATEGORY	A	B	C	D
CIRCLING	5540-1 880 (900-1)	5540-1¼ 880 (900-1¼)	5540-2½ 880 (900-2½)	5580-3 920 (1000-3)

REIL Rwy 22
MIRL Rwy 4-22 L

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	4500
074°	TDZE	2254
	Apt Elev	2254

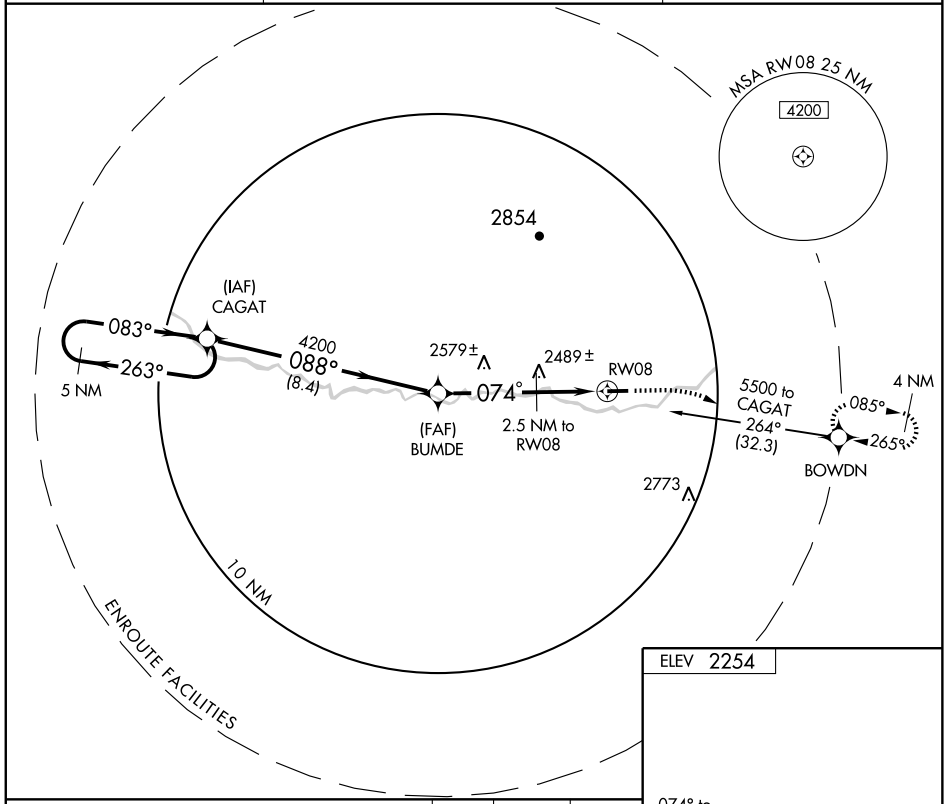
RNAV (GPS) RWY 8

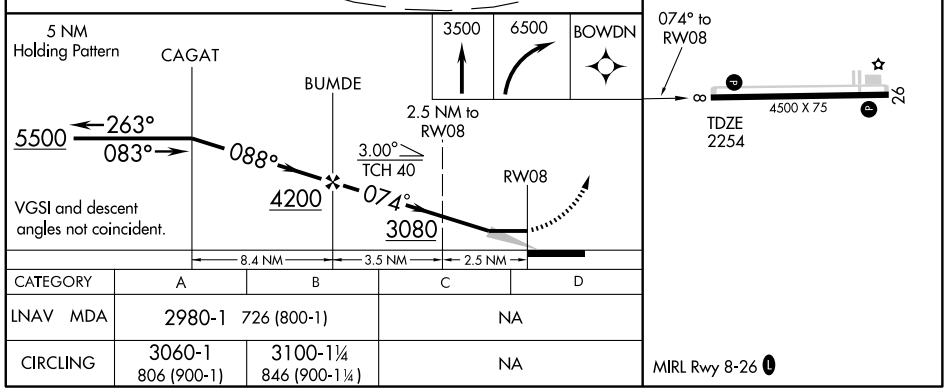
MALTA (M75)

NA Use Glasgow altimeter setting; when not received procedure not authorized.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 3500 then climbing right turn to 6500 direct BOWDN WP and hold.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
122.8	126.85 305.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2980-1 726 (800-1)		NA	
CIRCLING	3060-1 806 (900-1)	3100-1¼ 846 (900-1¼)	NA	

MALTA, MONTANA

AL-9493 (FAA)

APP CRS	Rwy ldg	4500
254°	TDZE	2254
	Apt Elev	2254

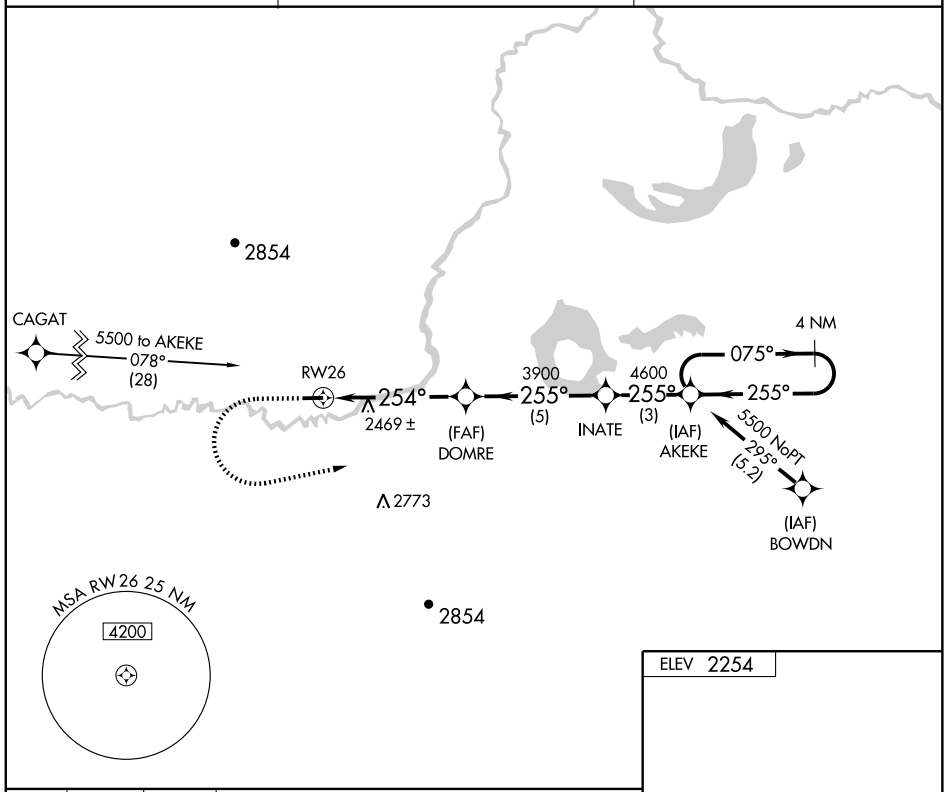
RNAV (GPS) RWY 26

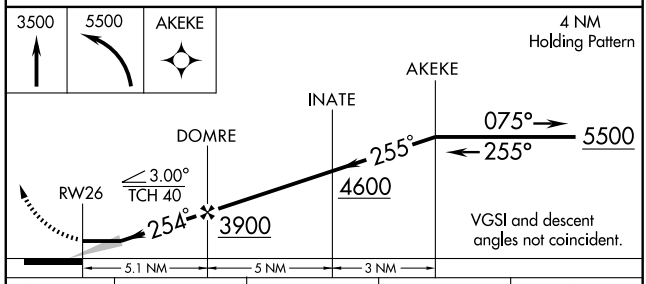
MALTA (M75)

NA Use Glasgow altimeter setting; when not received procedure not authorized.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 3500 then climbing left turn to 5500 direct AKEKE WP and hold.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
122.8	126.85 305.2	122.8 (CTAF) L





ELEV 2254

CATEGORY	A	B	C	D
LNAV MDA	2960-1 706 (800-1)		NA	
CIRCLING	3060-1 806 (900-1)	3100-1¼ 846 (900-1¼)	NA	

MIRL Rwy 8-26 L

NW-1. 08 APR 2010 to 06 MAY 2010

NDB HTN	APP CRS	Rwy ldg	5680
320	057°	TDZE	2629
		Apt Elev	2630

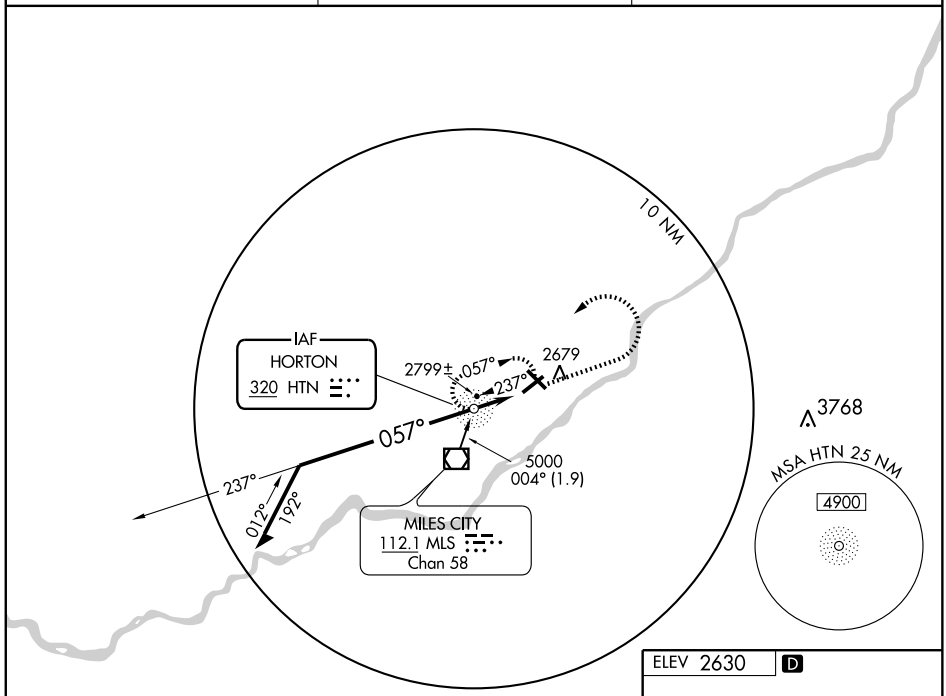
NDB RWY 4

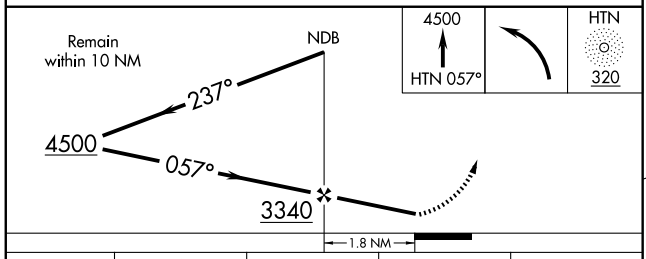
MILES CITY/ FRANK WILEY FIELD (MLS)

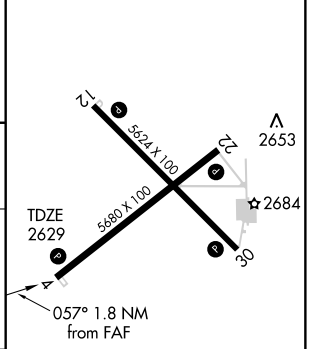
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4500 via 057° bearing from HTN NDB then left turn direct HTN NDB and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.575	122.2 255.4	123.0 (CTAF) L







REIL Rwys 4, 12, 22 and 30 L
MIRL Rwys 4-22 and 12-30 L

CATEGORY	A	B	C	D
S-4	3060-1 431 (500-1)		3060-1¼ 431 (500-1¼)	3060-1½ 431 (500-1½)
CIRCLING	3060-1 430 (500-1)	3080-1 450 (500-1)	3100-1½ 470 (500-1½)	3180-2 550 (600-2)

FAF to MAP 1.8 NM					
Knots	60	90	120	150	180
Min:Sec	1:48	1:12	0:54	0:43	0:36

NW-1. 08 APR 2010 to 06 MAY 2010

WAAS CH 42600 W04A	APP CRS 040°	Rwy ldg 5680 TDZE 2629 Apt Elev 2630

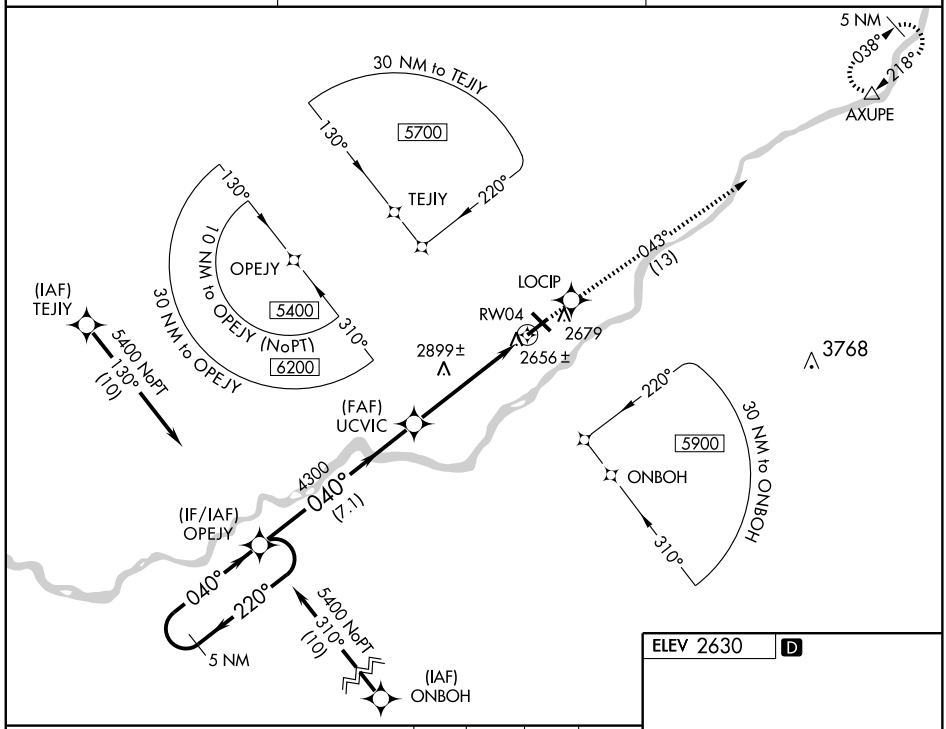
RNAV (GPS) RWY 4

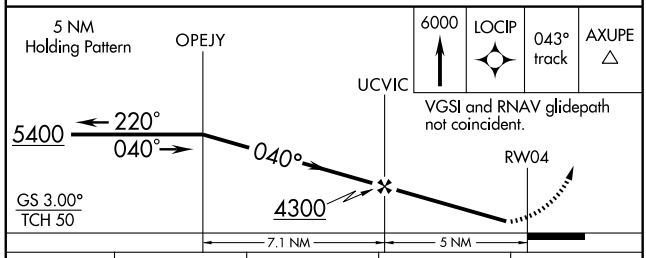
MILES CITY/ FRANK WILEY FIELD (MLS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 32°C (111°F).
Visibility reduction by helicopters NA.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 6000 direct LOCIP and via 043° track to AXUPE and hold.

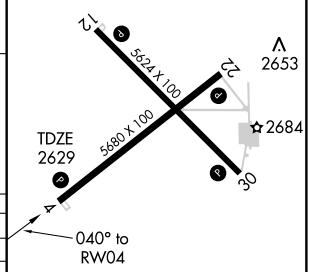
ASOS	GREAT FALLS RADIO	UNICOM
135.575	122.2 255.4	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	2879-1 250 (300-1)			
LNAV/ VNAV DA	2926-1 297 (300-1)			
LNAV MDA	3160-1 531 (600-1)		3160-1½ 531 (600-1½)	3160-1¾ 531 (600-1¾)
CIRCLING	3160-1 530 (600-1)		3160-1½ 530 (600-1½)	3180-2 550 (600-2)

ELEV 2630 D



REIL Rwys 4, 12, 22 and 30 L
MIRL Rwys 4-22 and 12-30 L

NW-1, 08 APR 2010 to 06 MAY 2010

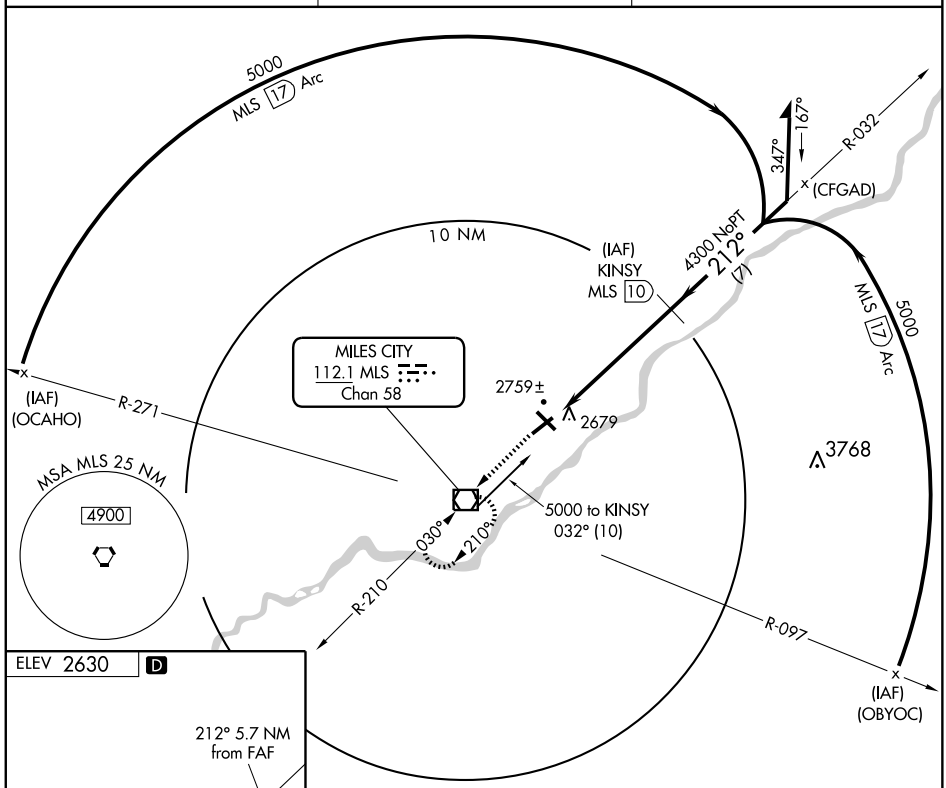
VORTAC MLS	APP CRS	Rwy ldg	5680
112.1	212°	TDZE	2628
Chan 58		Apt Elev	2630

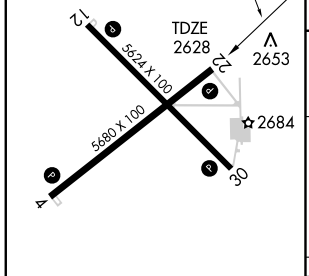
VOR/DME or GPS RWY 22

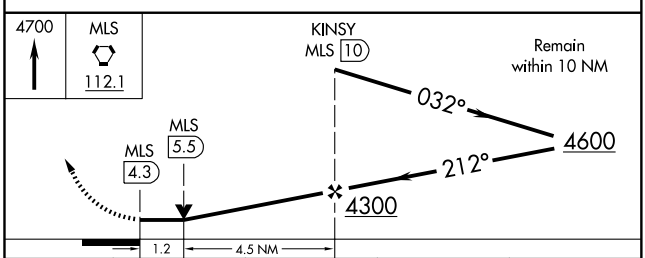
MILES CITY/FRANK WILEY FIELD (MLS)

MISSED APPROACH: Climb direct to MLS VORTAC. Continue climb to 4700 in MLS VORTAC holding pattern.

ASOS	GREAT FALLS RADIO	UNICOM
135.575	122.2 255.4	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-22	3020-1 392 (400-1)			3020-1¼ 392 (400-1¼)
CIRCLING	3060-1 430 (500-1)	3080-1 450 (500-1)	3100-1½ 470 (500-1½)	3180-2 550 (600-2)

REIL Rwys 4, 12, 22 and 30 L
MIRL Rwys 4-22 and 12-30 L

NW-1, 08 APR 2010 to 06 MAY 2010

VORTAC MLS	APP CRS	Rwy ldg	5680
112.1	030°	TDZE	2629
Chan 58		Apt Elev	2630

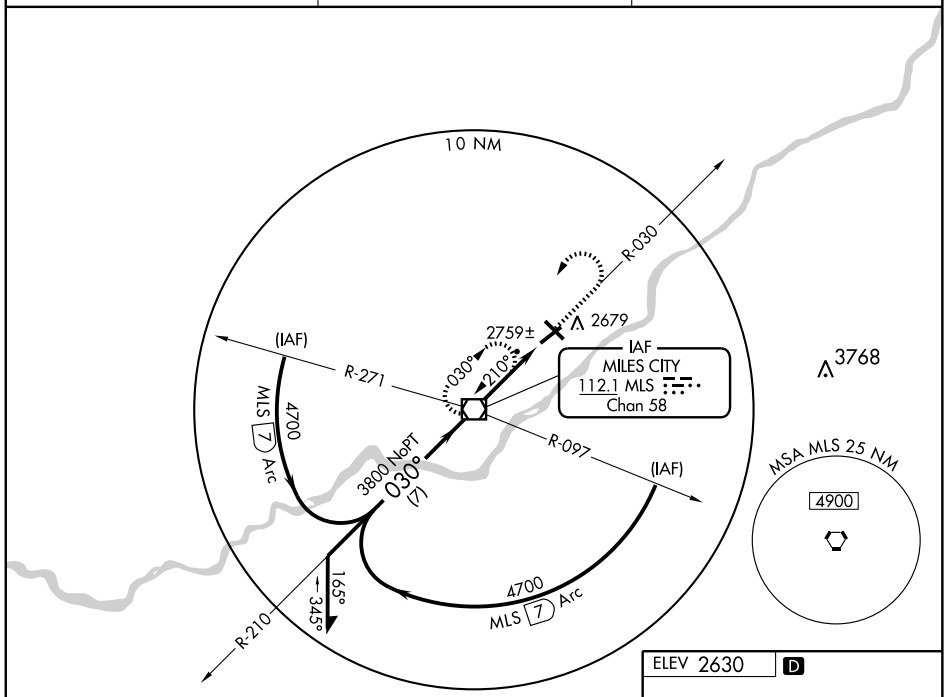
VOR RWY 4

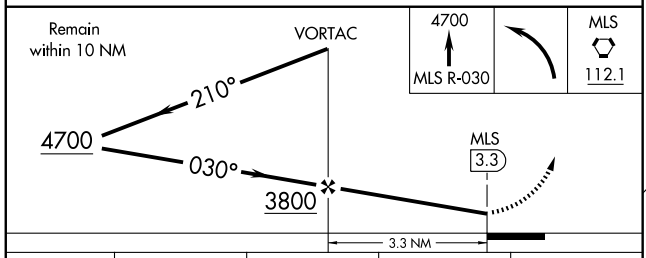
MILES CITY/ FRANK WILEY FIELD (MLS)

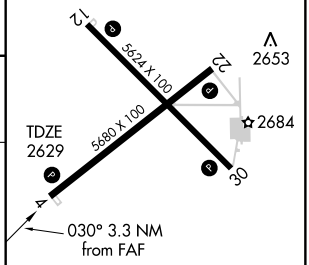
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4700 via MLS R-030 then left turn direct MLS VORTAC and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.575	122.2 255.4	123.0 (CTAF) L





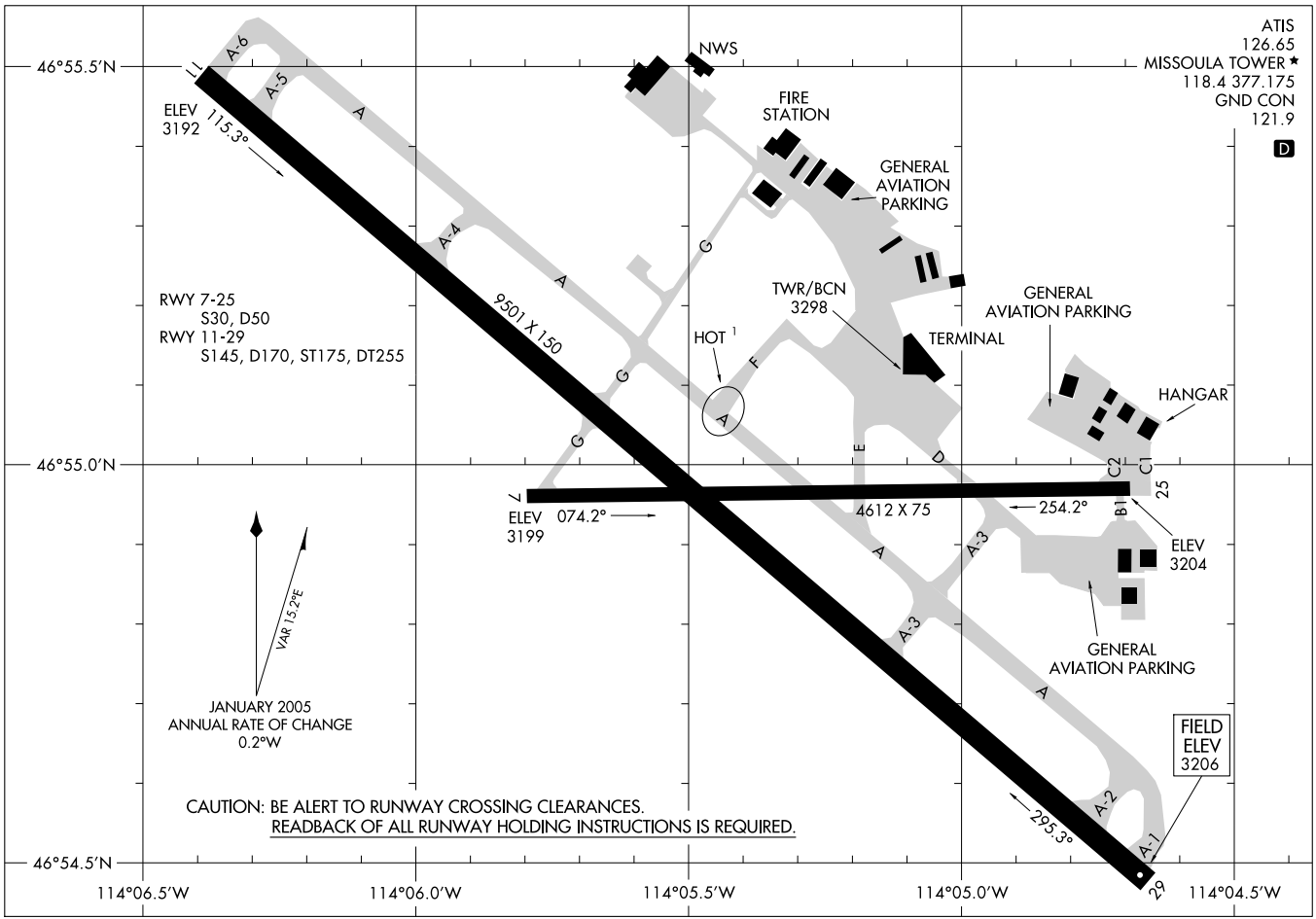


REIL Rwys 4, 12, 22 and 30 L
MIRL Rwys 4-22 and 12-30 L

CATEGORY	A	B	C	D
S-4	3040-1 411 (500-1)		3040-1¼ 411 (500-1¼)	
CIRCLING	3060-1 430 (500-1)	3080-1 450 (500-1)	3100-1½ 470 (500-1½)	3180-2 550 (600-2)

FAF to MAP 3.3 NM					
Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

NW-1, 08 APR 2010 to 06 MAY 2010


AIRPORT DIAGRAM
AL-266 (FAA)
MISSOULA INTL (MSO)
MISSOULA, MONTANA
ATIS
126.65
MISSOULA TOWER ★
118.4 377.175
GND CON
121.9
D
46°55.5'N
46°55.0'N
46°54.5'N
114°06.5'W
114°06.0'W
114°05.5'W
114°05.0'W
114°04.5'W
NWS
FIRE STATION
GENERAL AVIATION PARKING
TWR/BCN 3298
TERMINAL
HOT 1
HANGAR
ELEV 3204
FIELD ELEV 3206
ELEV 3192
115.3°
9501 X 150
ELEV 3199
074.2°
4612 X 75
254.2°
295.3°
RWY 7-25
S30, D50
RWY 11-29
S145, D170, ST175, DT255
VAR 15.2°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.2°W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

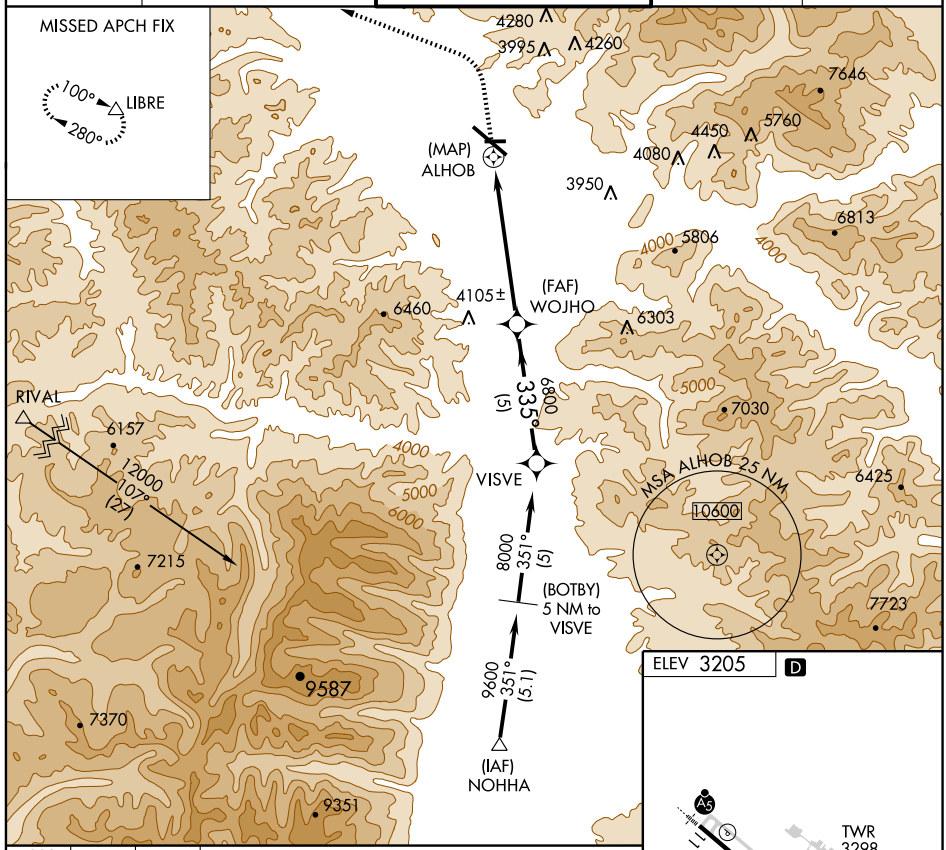
APP CRS	Rwy ldg	N/A
335°	TDZE	N/A
	Apt Elev	3205

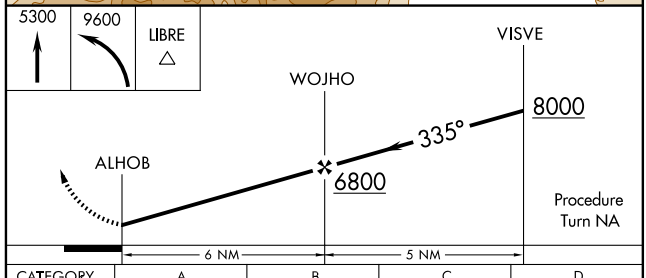
GPS-D
MISSOULA INTL (MSO)

NA

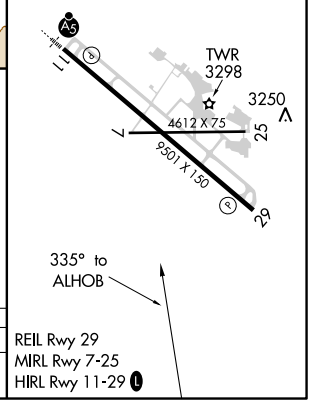
MISSED APPROACH: Climb to 5300 then climbing left turn to 9600 direct LIBRE WP and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) 377.175	121.9	122.95





ELEV 3205 D



REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L

CATEGORY	A	B	C	D
CIRCLING	5120-1¼ 1915 (2000-1¼)	5120-1½ 1915 (2000-1½)	5120-3 1915 (2000-3)	

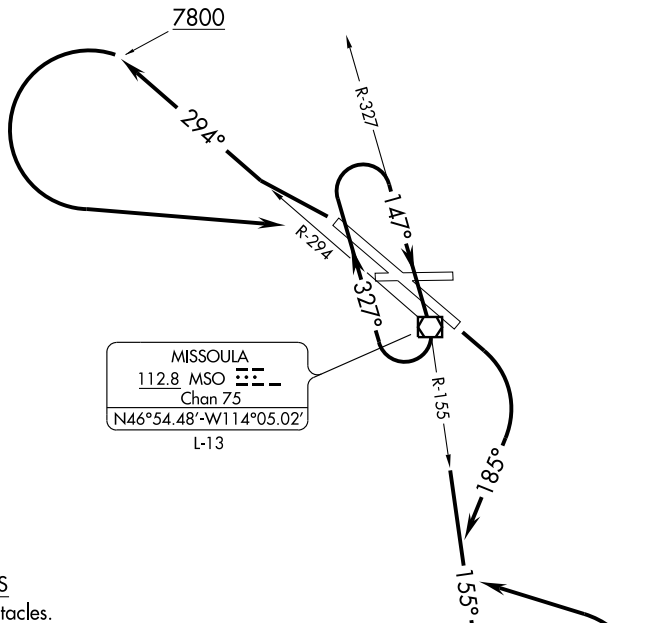
NW-1, 08 APR 2010 to 06 MAY 2010

GRZLY ONE DEPARTURE (OBSTACLE)

SL-266 (FAA)

MISSOULA INTL (MSO)
MISSOULA, MONTANA

ATIS 126.65
GND CON
121.9
MISSOULA TOWER ★
118.4 (CTAF) 377.175
SPOKANE DEP CON
124.9 298.95
SALT LAKE CITY CENTER
133.4 285.4



TAKE-OFF MINIMUMS

RWY 7, 25: NA- Obstacles.
RWY 11: Standard with minimum climb of 340′ per NM to 7800, or 2700-3 for climb in visual conditions.
RWY 29: Standard with minimum climb of 273′ per NM to 7800, or 2700-3 for climb in visual conditions.

TAKE-OFF OBSTACLE NOTES:

RWY 11: Tree 505′ from DER, 171′ left of centerline, 100′ AGL/3300′ MSL.
Fence 38′ from DER, 487′ right of centerline, 21′ AGL/3213′ MSL
RWY 29: Multiple AAOs beginning 6.5 NM from DER, 1.5 NM left of centerline, up to 200′ AGL/4639′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 11: Climbing right turn heading 185° to intercept MSO R-155, southeast bound to 7800, thence. . . .
or, climb in visual conditions to cross MSO VOR/DME southeast bound at or above 5800, continue climb to 7800 via MSO VOR/DME R-155, thence. . . .

TAKE-OFF RUNWAY 29: Climb via MSO R-294 to 7800, then climbing left turn via MSO R-294 to MSO VOR/DME, climb in MSO VOR/DME holding pattern to MEA/MCA for route of flight or, climb in visual conditions to cross MSO VOR/DME southeast bound at or above 5800, continue climb to 7800 via MSO VOR/DME R-155, thence. . . .

. . . .climbing left turn via MSO VOR/DME R-155 to MSO VOR/DME, climb in MSO VOR/DME holding pattern to MEA/MCA for route of flight.

LOC I-MSO	APP CRS	Rwy ldg	9501
109.3	113°	TDZE	3200
		Apt Elev	3205

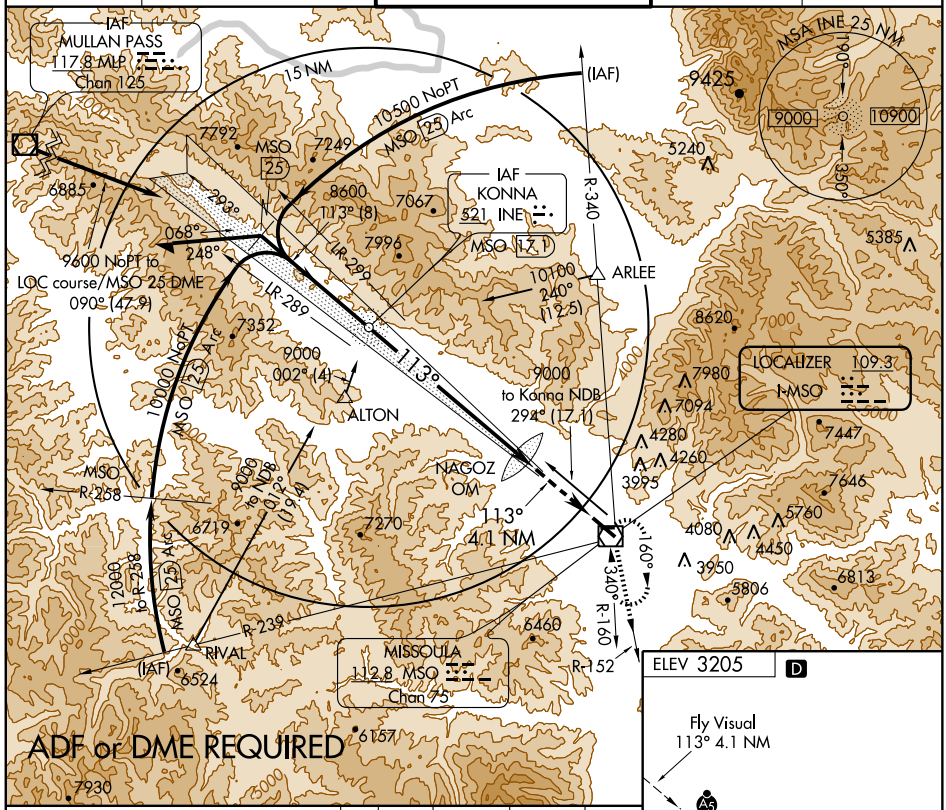
ILS RWY 11
MISSOULA INTL (MSO)

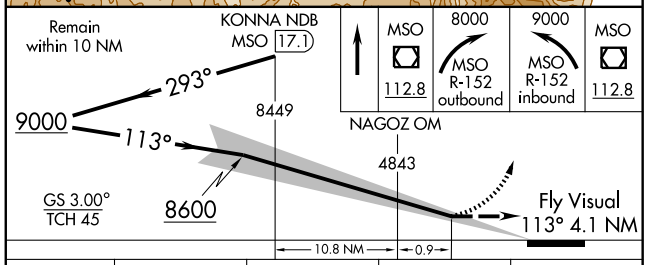
Inoperative table does not apply.

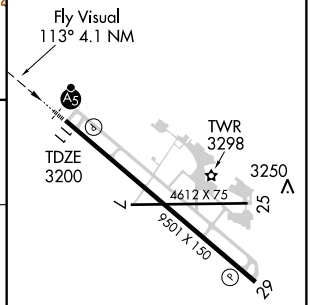
MALSR

MISSED APPROACH: Climb direct MSO VOR/DME then climbing right turn to 8000 outbound on MSO R-152 then climbing left turn to 9000 inbound on the MSO R-152 to MSO VOR/DME and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 11	4550-5 1350 (1400-5)			
S-LOC 11	NA			
CIRCLING	NA			

REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L

NW-1, 08 APR 2010 to 06 MAY 2010

KONNA TWO DEPARTURE

SL-266 (FAA)

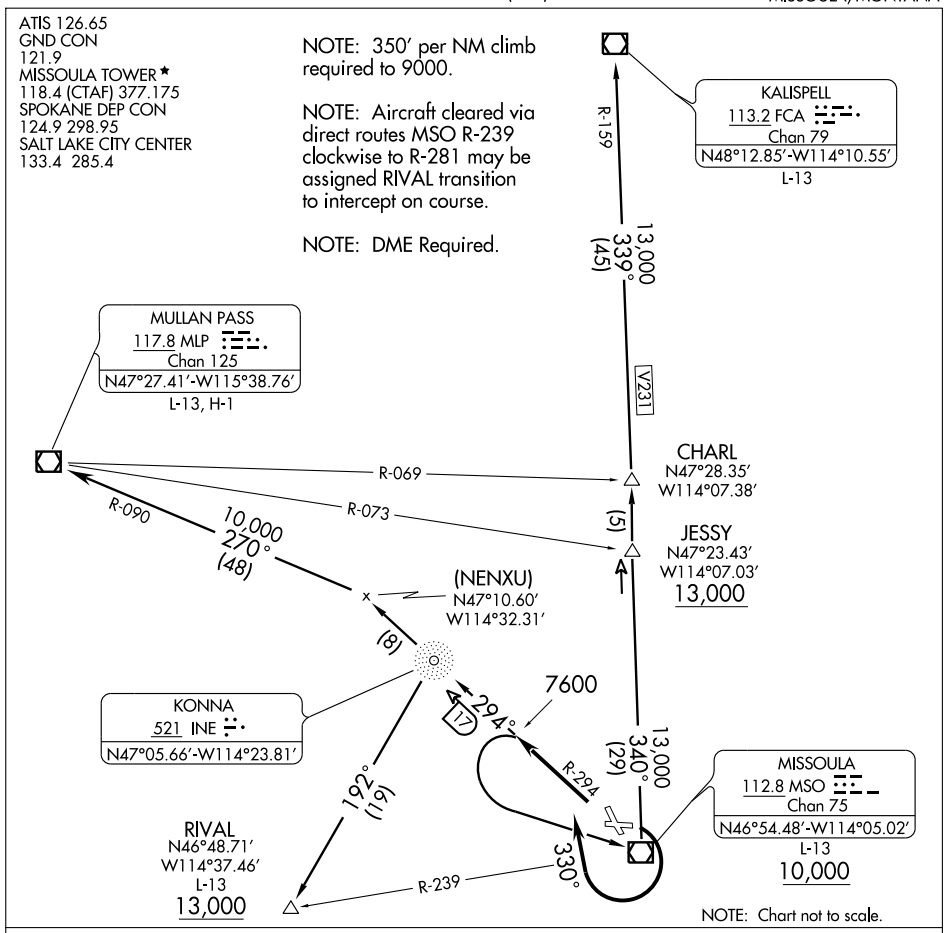
MISSOULA INTL (MSO)
MISSOULA, MONTANA

ATIS 126.65
GND CON
121.9
MISSOULA TOWER★
118.4 (CTAF) 377.175
SPOKANE DEP CON
124.9 298.95
SALT LAKE CITY CENTER
133.4 285.4

NOTE: 350′ per NM climb required to 9000.

NOTE: Aircraft cleared via direct routes MSO R-239 clockwise to R-281 may be assigned RIVAL transition to intercept on course.

NOTE: DME Required.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7 AND 25: Not authorized.
TAKE-OFF RUNWAY 11: Climbing right turn heading 330° to intercept MSO R-294, then climb to 7600′ via MSO R-294, then climb via (transition).
TAKE-OFF RUNWAY 29: Intercept MSO R-294 immediately after departure, then climb to 7600′ via MSO R-294, then climb via (transition).
KALISPELL TRANSITION (KONNA2.FCA): After leaving 7600′, make a climbing left turn direct MSO VOR/DME, then via V231 to FCA VOR/DME.
MISSOULA TRANSITION (KONNA2.MSO): After leaving 7600′, make a climbing left turn direct MSO VOR/DME.
MULLAN PASS TRANSITION (KONNA2.MLP): After reaching 7600′, continue on MSO R-294 and MLP R-090 to MLP VOR/DME.
RIVAL TRANSITION (KONNA2.RIVAL): After reaching 7600′, continue on MSO R-294 and INE NDB 192° bearing to RIVAL INT.

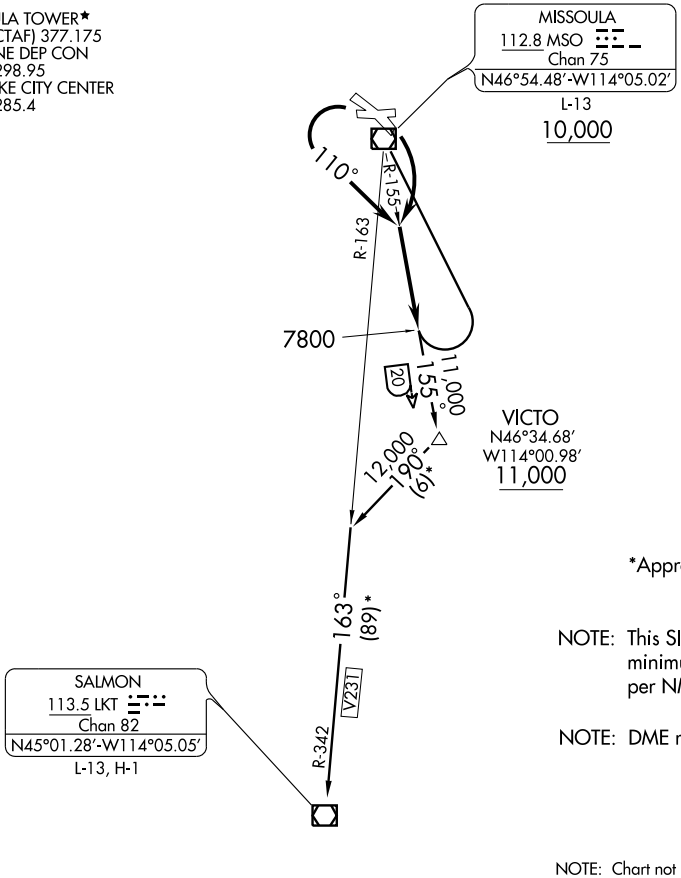
NW-1. 08 APR 2010 to 06 MAY 2010

MZULA ONE DEPARTURE

SL-266 (FAA)

MISSOULA INTL (MSO)
MISSOULA, MONTANA

ATIS 126.65
GND CON
121.9
MISSOULA TOWER★
118.4 (CTAF) 377.175
SPOKANE DEP CON
124.9 298.95
SALT LAKE CITY CENTER
133.4 285.4



*Approx dist

NOTE: This SID requires a minimum climb of 400′ per NM to 11,000′.

NOTE: DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7: Not authorized.
TAKE-OFF RUNWAY 11: Climbing right turn to intercept MSO R-155, thence....
TAKE-OFF RUNWAY 25 OR 29: Climbing left turn heading 110° to intercept MSO R-155, thence....
....climb to 7800′ via MSO R-155; thence climb via (transition).
MISSOULA TRANSITION (MZULA1.MSO): After leaving 7800′, make a climbing left turn direct to MSO VOR/DME.
SALMON TRANSITION (MZULA1.LKT): After reaching 7800′ continue on MSO R-155 until VICTO INT. Then via 190° heading and V231 to LKT VOR/DME.

NW-1, 08 APR 2010 to 06 MAY 2010

WAAS CH 65715 W11B	APP CRS 113°	Rwy ldg 9501 TDZE 3200 Apt Elev 3206

RNAV (GPS) Y RWY 11

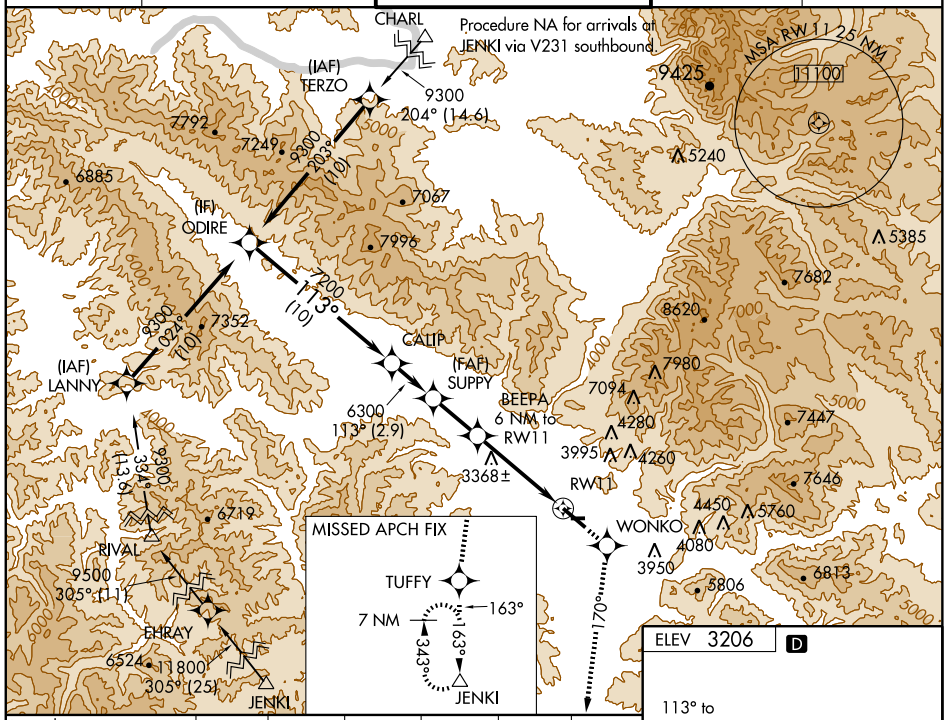
MISSOULA INTL (MSO)

Inoperative table does not apply to LNAV % Cats. A and B. For inoperative MALSR, increase LPV visibility all Cats. to 2½ miles. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
#Missed approach requires minimum climb of 290 feet per NM to 8300.

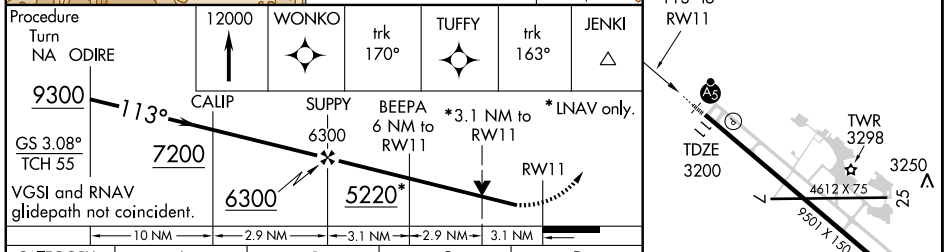
MALSR

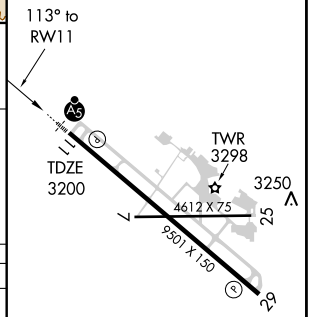
MISSED APPROACH: Climb to 12000 direct WONKO and via track 170° to TUFFY and via track 163° to JENKI and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95



ELEV 3206 D





CATEGORY	A	B	C	D
LPV DA#	3896-2 696 (700-2)			
LNAV MDA#	4220-¾ 1020 (1100-¾)	4220-1 1020 (1100-1)	4220-2½ 1020 (1100-2½)	
LNAV MDA%	5100-1¼ 1900 (2000-1¼)	5100-1½ 1900 (2000-1½)	5100-2½ 1900 (2000-2½)	
CIRCLING	5100-1¼ 1894 (1900-1¼)	5100-1½ 1894 (1900-1½)	5100-3 1894 (1900-3)	

REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L

NW-1. 08 APR 2010 to 06 MAY 2010

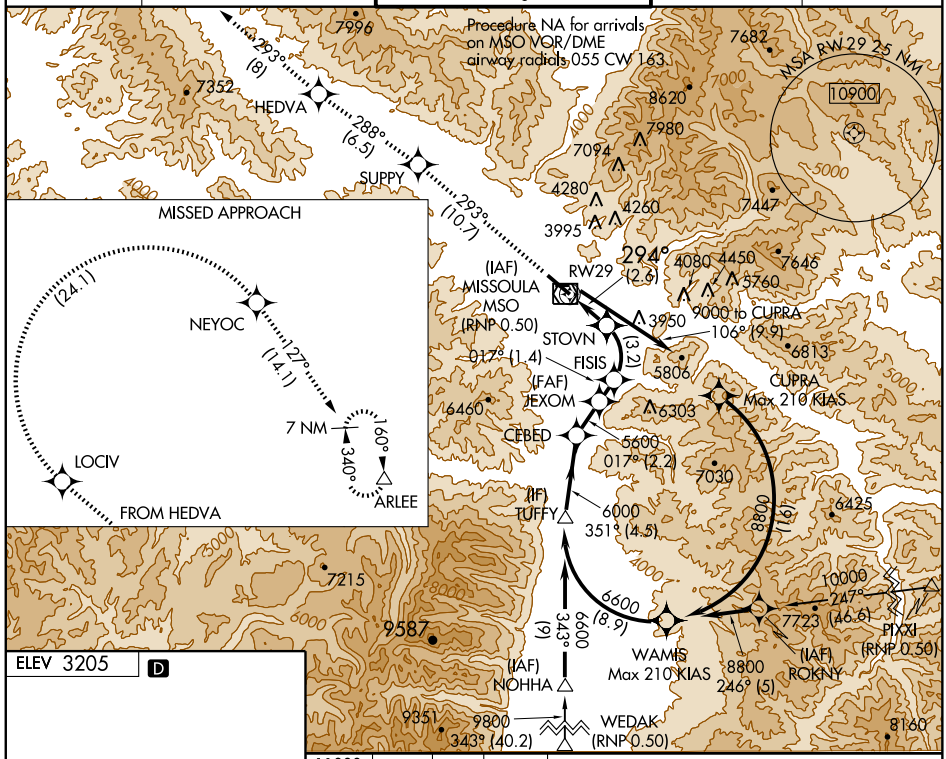
APP CRS	Rwy ldg	9501
294°	TDZE	3205
	Apt Elev	3205

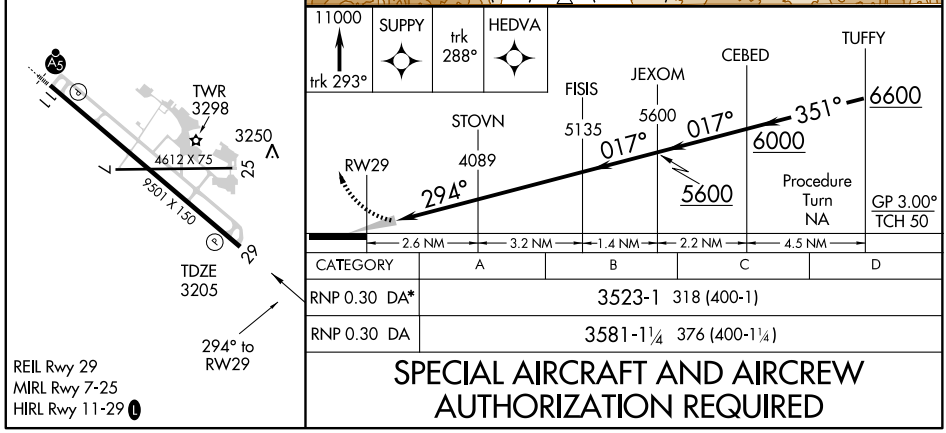
RNAV (RNP) RWY 29
MISSOULA INTL (MSO)

RF and GPS required. When local altimeter setting not received, procedure NA. For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F).
* Missed approach requires minimum climb of 215 feet per NM to 5000.

MISSED APPROACH: Climb to 11000 via track 293° to SUPPY, and via track 288° to HEDVA, and via track 293° to LOCIV, and via right turn to NEYOC, and via track 127° to ARLEE and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95





CATEGORY	A	B	C	D
RNP 0.30 DA*	3523-1 318 (400-1)			
RNP 0.30 DA	3581-1¼ 376 (400-1¼)			

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

NW-1. 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	9501
113°	TDZE	3200
	Apt Elev	3206

RNAV (RNP) Z RWY 11

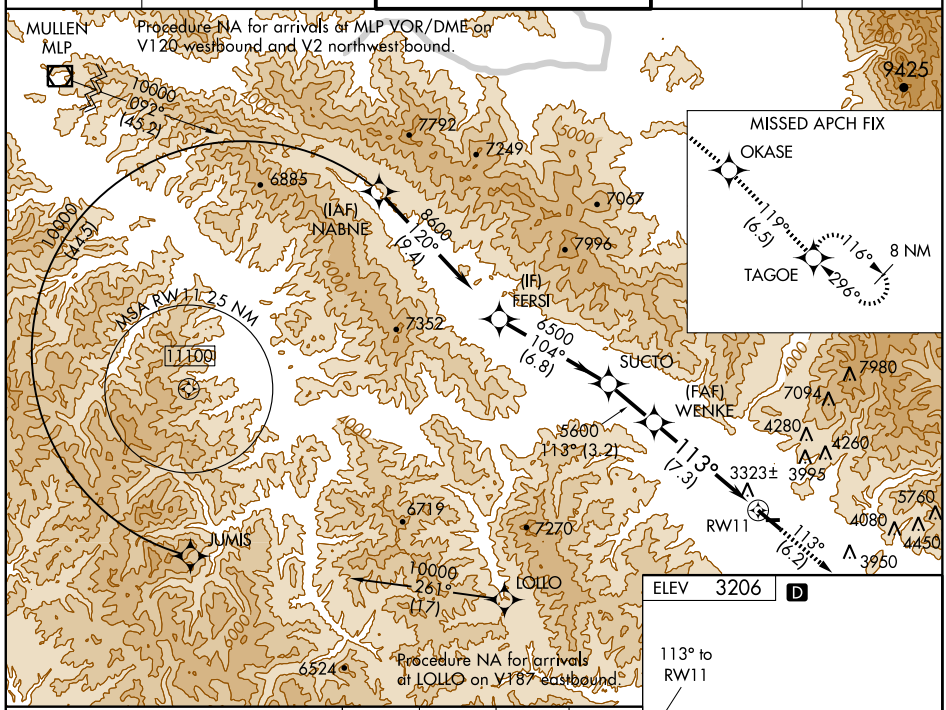
MISSOULA INTL (MSO)

GPS required. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, procedure NA below -21°C (-6°F) or above 43°C (109°F). For inoperative MALSR increase RNP 0.12 visibility all Cats to 1¼, RNP 0.30 visibility all Cats to 2½.
** Missed approach requires minimum climb of 425 feet per NM to 8300.
Missed approach requires minimum climb of 350 feet per NM to 8300, if unable see RNAV (GPS) Y RWY 11.

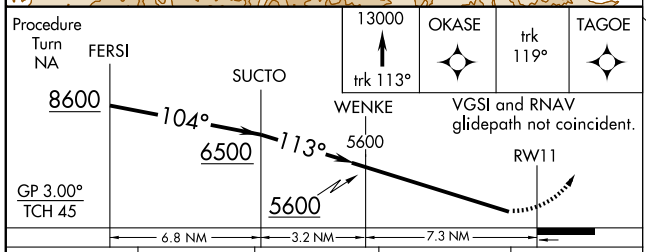
MALSR

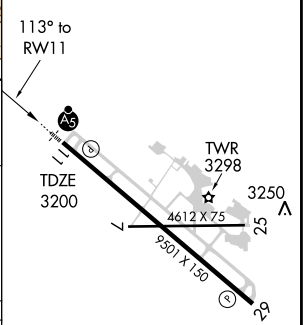
MISSED APPROACH: Climb to 13000 via track 113° to OKASE, and via track 119° to TAGOE and hold, continue climb-in-hold to 13000.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95



ELEV 3206 D





CATEGORY	A	B	C	D
RNP 0.12 DA **	3518-¾ 318 (400-¾)			
RNP 0.30 DA##	3880-2 680 (700-2)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L

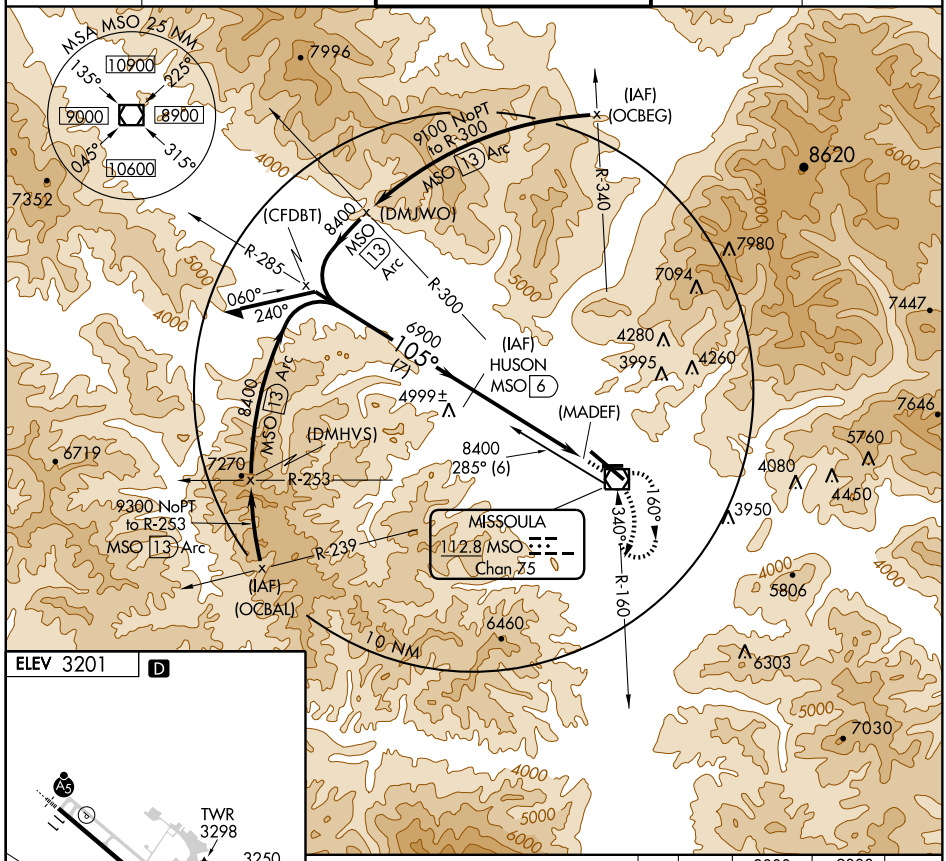
VOR/DME MSO 112.8 Chan 75	APP CRS 105°	Rwy ldg N/A TDZE N/A Apt Elev 3201

VOR/DME or GPS-A

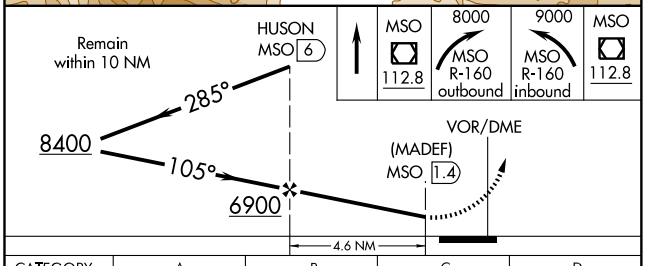
MISSOULA INTL (MSO)

MISSED APPROACH: Climb direct to MSO VOR/DME, then climbing right turn to 8000 outbound on R-160 then climbing left turn to 9000 inbound on the R-160 to MSO VOR/DME and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95



REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L



CATEGORY	A	B	C	D
CIRCLING	5060-1¼ 1859 (1900-1¼)	5060-1½ 1859 (1900-1½)	5060-3 1859 (1900-3)	

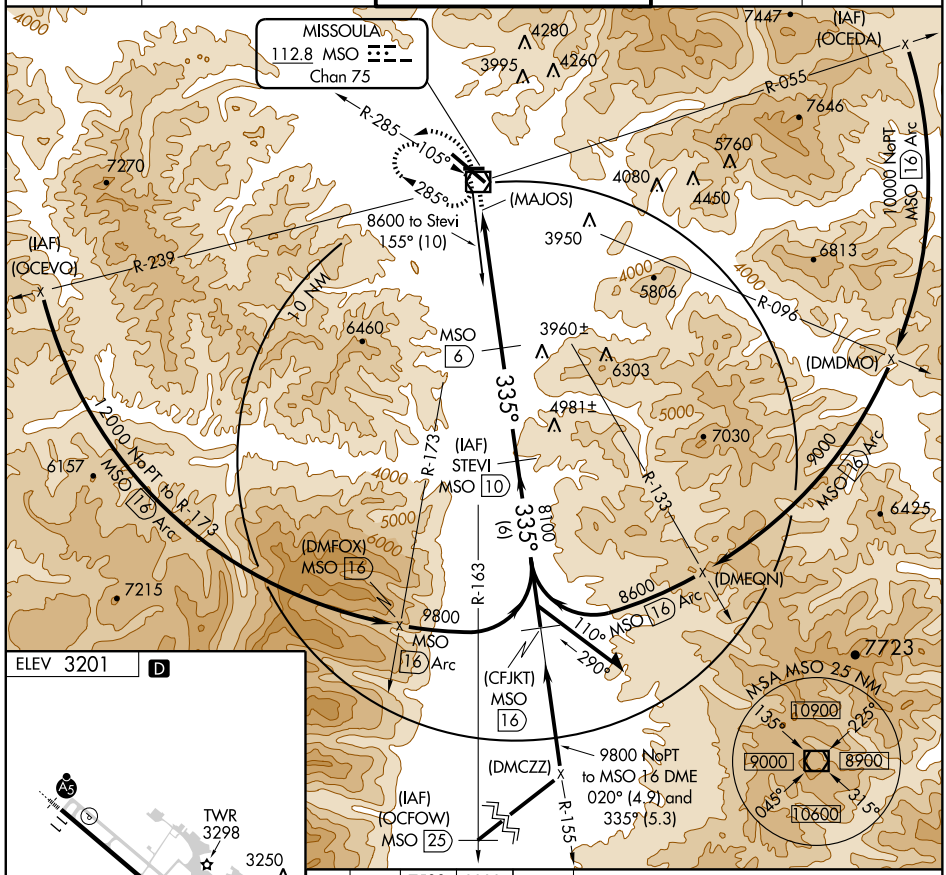
NW-1, 08 APR 2010 to 06 MAY 2010

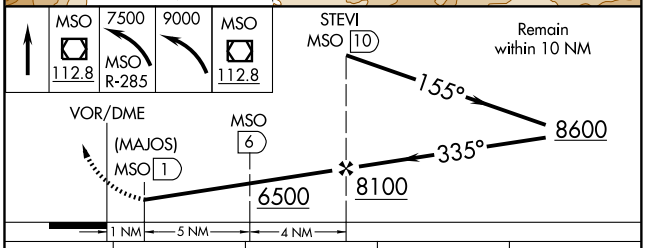
VOR/DME MSO 112.8 Chan 75	APP CRS 335°	Rwy ldg N/A TDZE N/A Apt Elev 3201

VOR/DME or GPS-B
MISSOULA INTL (MSO)

MISSED APPROACH: Climb direct MSO VOR/DME, then climbing left turn to 7500 on R-285 then climbing left turn to 9000 direct MSO VOR/DME and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95





REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L

CATEGORY	A	B	C	D
CIRCLING	4500-1¼ 1299 (1300-1¼)	4500-1½ 1299 (1300-1½)	4600-3 1399 (1400-3)	4740-3 1539 (1600-3)

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	N/A
302°	TDZE	N/A
	Apt Elev	2250

RNAV (GPS)-A

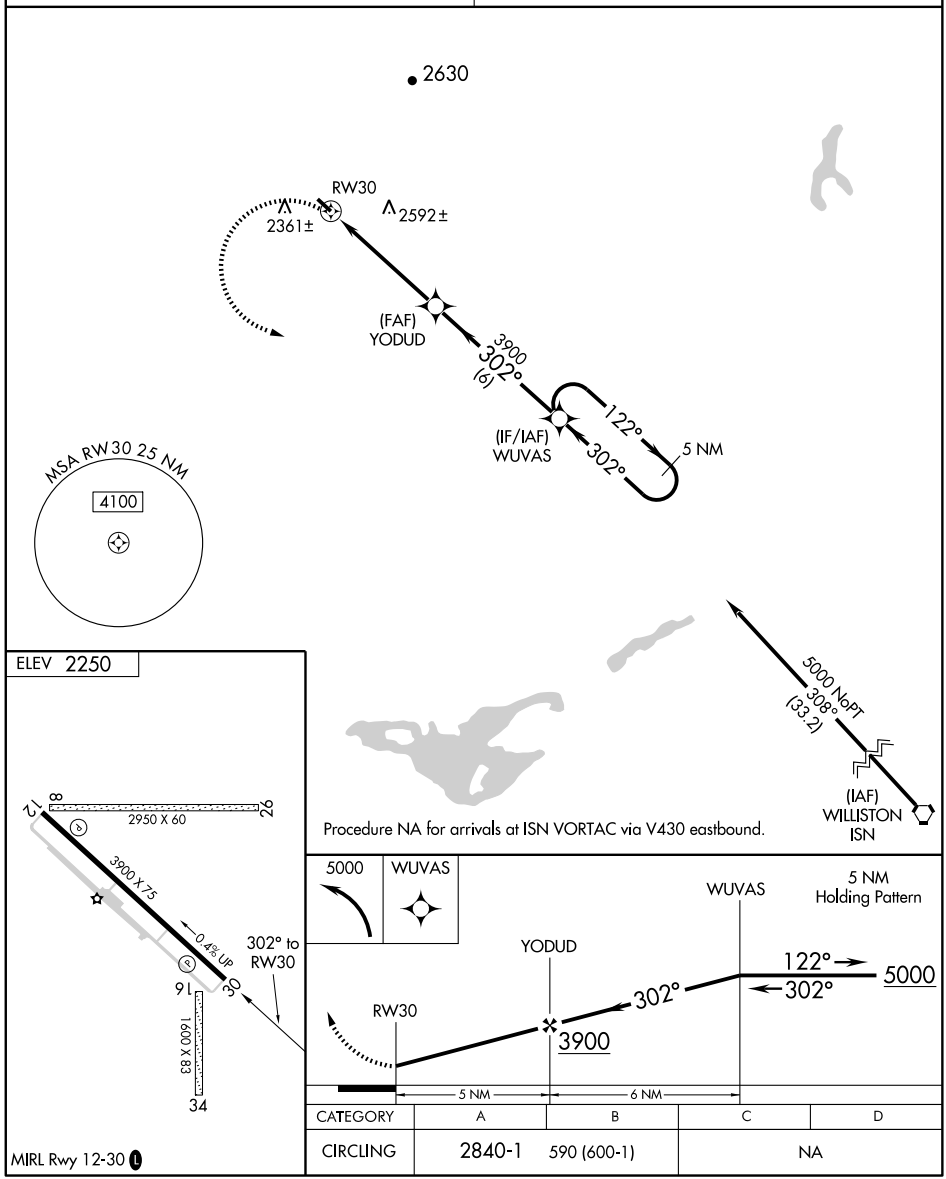
PLENTYWOOD/ SHER-WOOD (PWD)

NA

Procedure NA at night. DME/DME RNP- 0.3 NA.
Use Sloulin Fld Intl, ND altimeter setting, if not received, use Wolf Point/ L.M. Clayton altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climbing left turn to 5000 direct WUVAS and hold.

SALT LAKE CENTER	UNICOM
126.85 305.2	122.8 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	2840-1	590 (600-1)	NA	

MIRL Rwy 12-30 L

NW-1. 08 APR 2010 to 06 MAY 2010

(ANGIL1.ANGIL) 07074 SL-9529 (FAA)

ANGIL ONE DEPARTURE (RNAV) (OBSTACLE)

POLSON (8S1)
POLSON, MONTANA

SALT LAKE CITY CENTER
133.4 285.4
GREAT FALLS RADIO
122.6
CTAF 122.8

V448

KALISPELL
FCA

V536

V536

V231

ANGIL
10000

160°

7 NM

340°
(11)

TEPSE

(9)

SKOTT INT

V231

TAKE-OFF MINIMUMS
Rwy 36: Standard with minimum climb of 280′ per NM to 6600.
Trees 2.38 NM from departure end of runway, 3383′ left of centerline, 100′ AGL/3179′ MSL. Road 540′ from departure end of runway, 2955′ MSL.
Rwy 18: NA for this departure.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 36: Climb direct to TEPSE WP, then via 340° track to ANGIL WP, Thence....

....Climb in the ANGIL WP holding pattern to cross ANGIL WP at or above 10,000 prior to proceeding on course.

NW-1. 08 APR 2010 to 06 MAY 2010

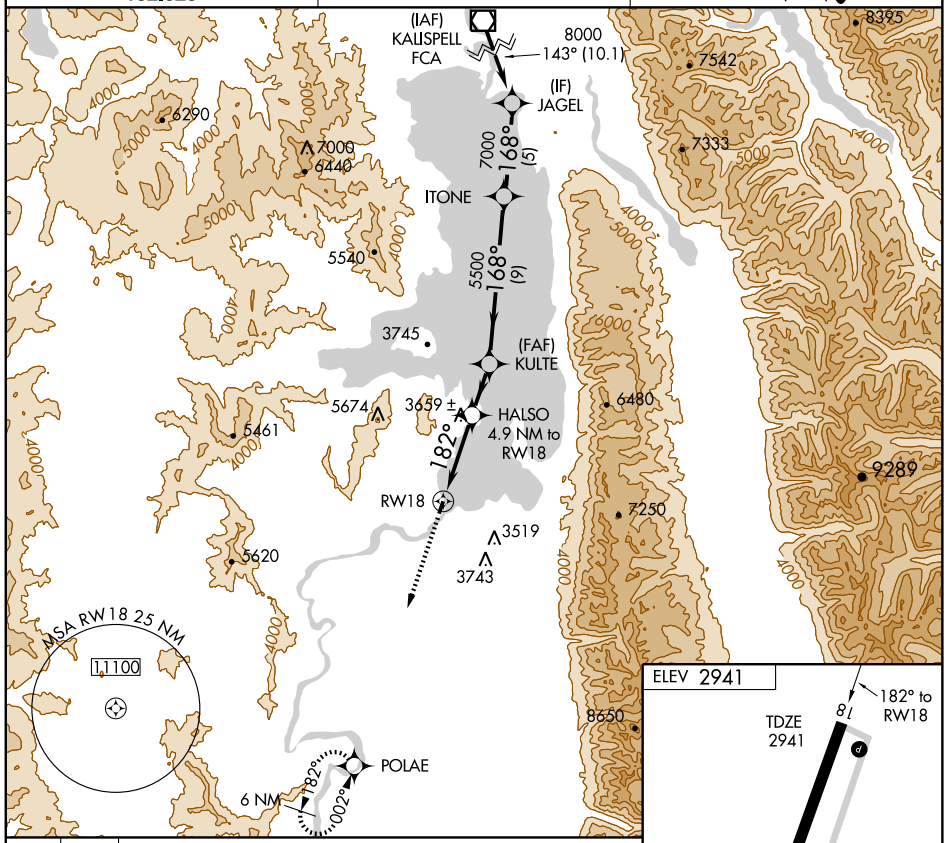
RNAV (GPS) RWY 18
POLSON (8S1)

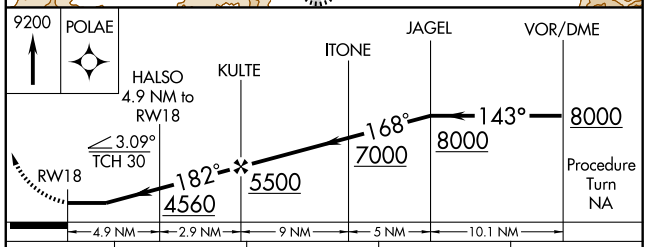
APP CRS	Rwy ldg	4195
182°	TDZE	2941
	Apt Elev	2941

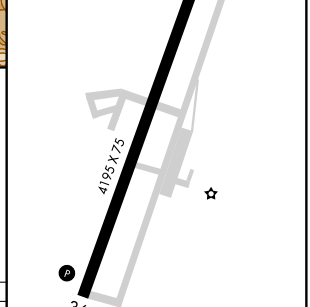
Procedure NA at night.
DME/DME RNP- 0.3 NA.
Use Glacier Park Intl altimeter setting.
NA

MISSED APPROACH: Climb to 9200 direct POLAE and hold.

GLACIER PARK INTL ASOS	SALT LAKE CENTER	UNICOM
132.625	133.4 285.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4480-1¼ 1539 (1600-1¼)	4480-1½ 1539 (1600-1½)	NA	
CIRCLING	4480-1¼ 1539 (1600-1¼)	4480-1½ 1539 (1600-1½)	NA	

MIRL Rwy 18-36 L

NW-1, 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	4195
013°	TDZE	2941
	Apt Elev	2941

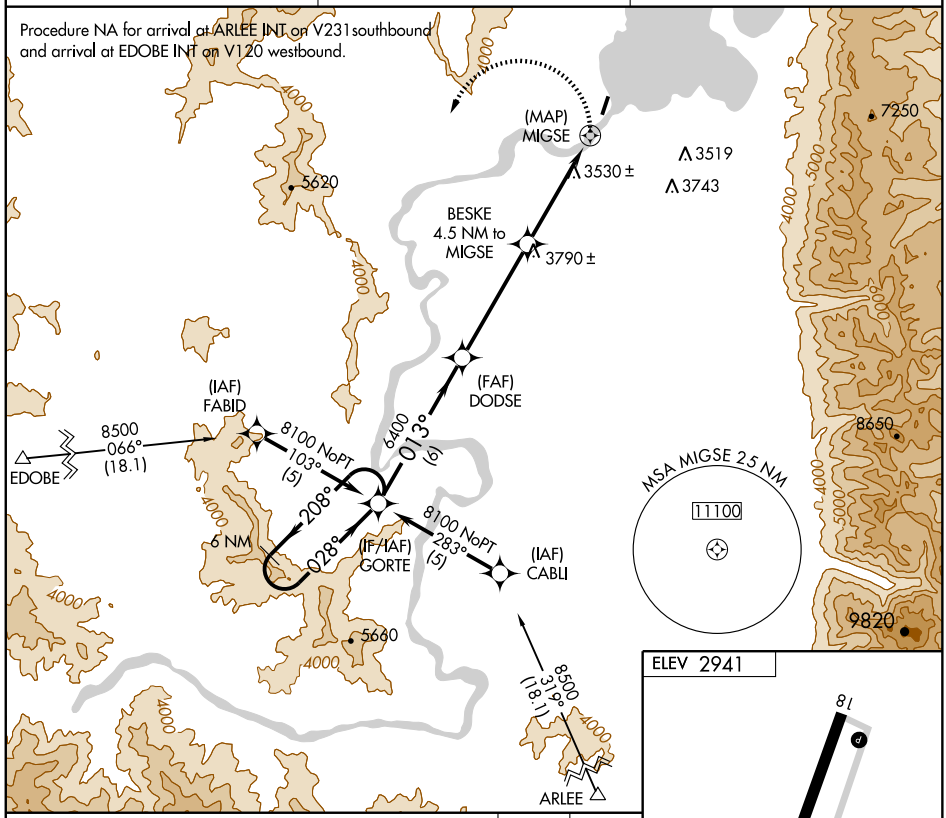
RNAV (GPS) RWY 36
POLSON (8S1)

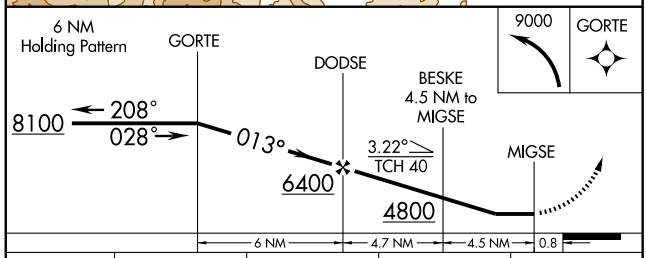
Procedure NA at night.
DME/DME RNP-0.3 NA.
Use Glacier Park Intl altimeter setting.

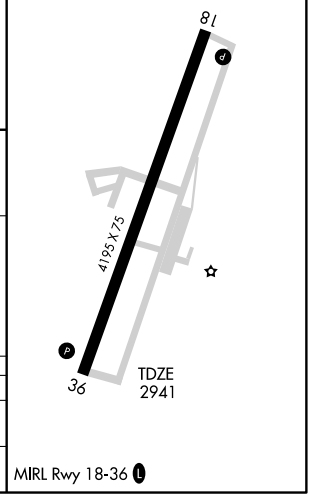
NA

MISSED APPROACH: Climbing left turn to 9000 direct GORTE WP and hold.

GLACIER PARK INTL ASOS	SALT LAKE CENTER	UNICOM
132.625	133.4 285.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV	4340-1¼ 1399 (1400-1¼)	4340-1½ 1399 (1400-1½)	NA	
CIRCLING	4340-1¼ 1399 (1400-1¼)	4340-1½ 1399 (1400-1½)	NA	

NW-1, 08 APR 2010 to 06 MAY 2010

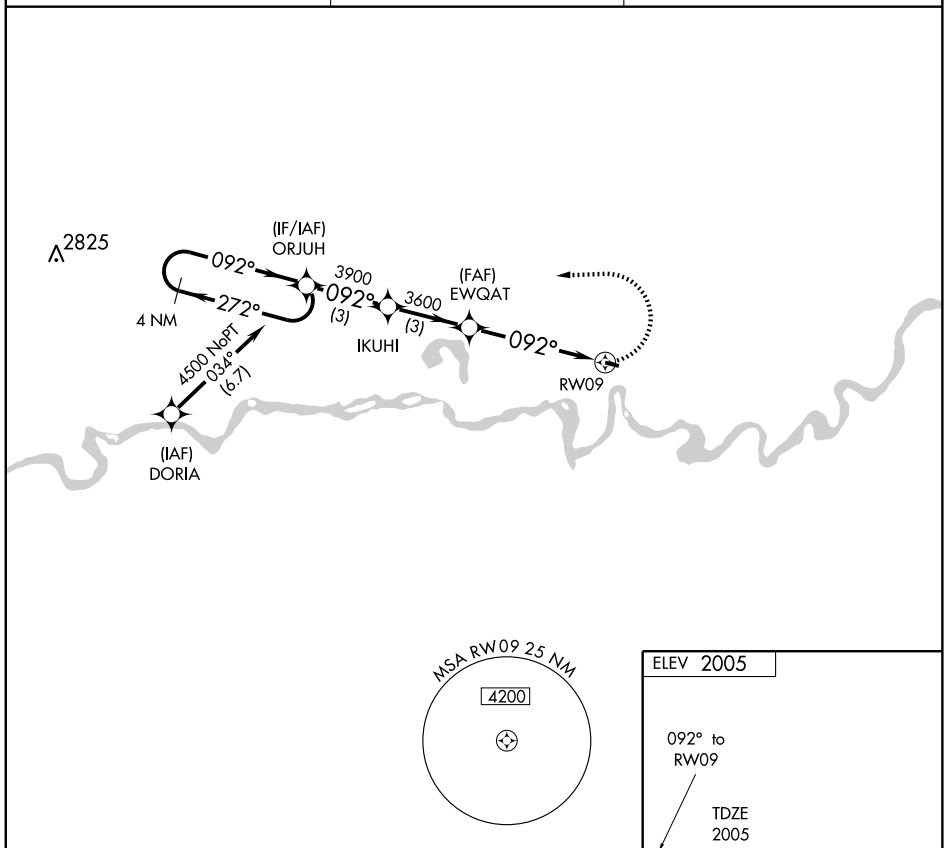
APP CRS	Rwy ldg	3030
092°	TDZE	2005
	Apt Elev	2005

RNAV (GPS) RWY 9
POPLAR (42S)

NA Use Wolf Point altimeter setting.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing left turn to 4500 direct ORJUH WP and hold.

WOLF POINT ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	2480-1	475 (500-1)	NA	
CIRCLING	2500-1	495 (500-1)	NA	

MIRL Rwy 9-27 L

NW-1. 08 APR 2010 to 06 MAY 2010

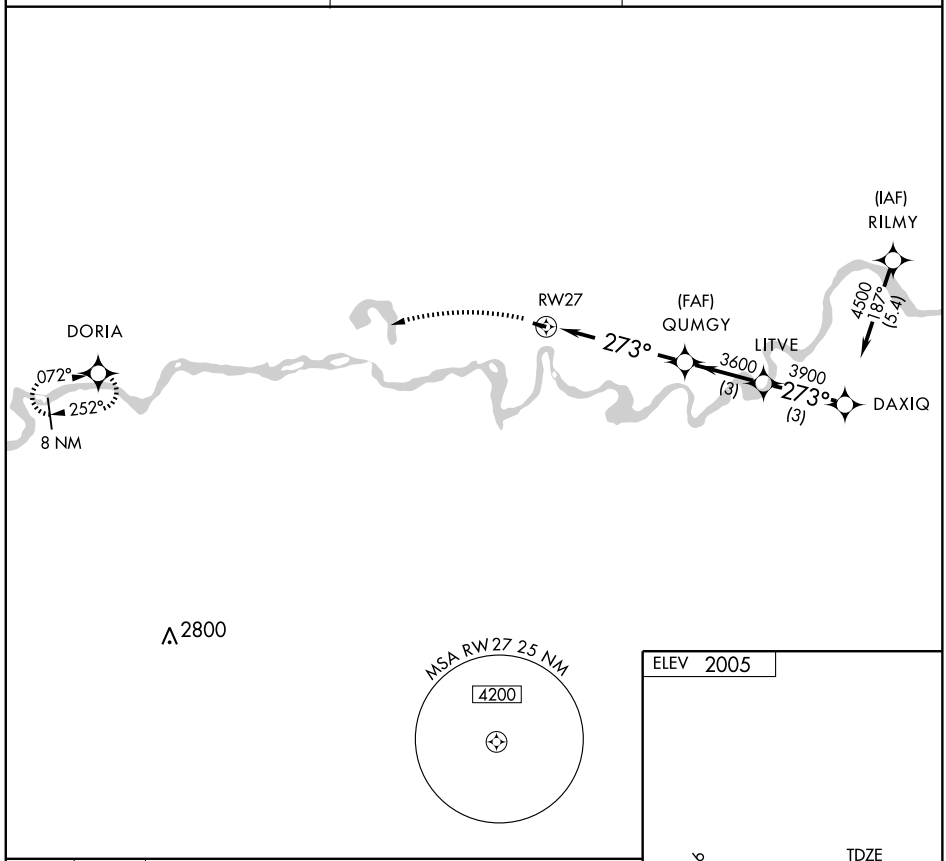
APP CRS	Rwy ldg	3030
273°	TDZE	2005
	Apt Elev	2005

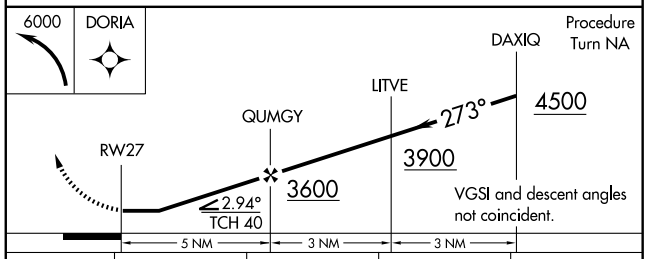
RNAV (GPS) RWY 27
POPLAR (42S)

NA Use Wolf Point altimeter setting.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 not authorized.

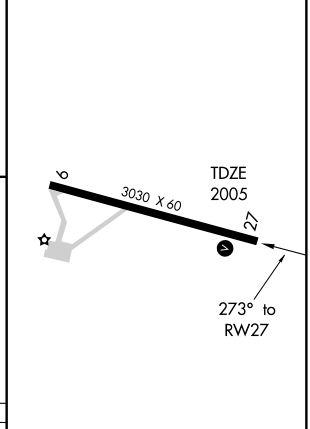
MISSED APPROACH: Climbing left turn to 6000 direct DORIA WP and hold.

WOLF POINT ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2460-1	455 (500-1)	NA	
CIRCLING	2500-1	495 (500-1)	NA	

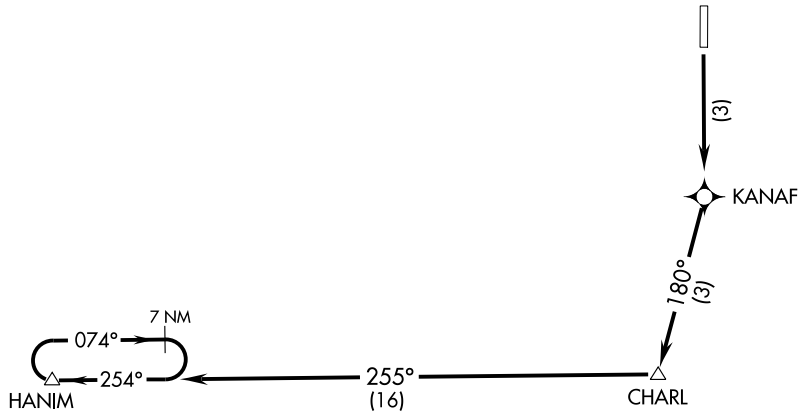


NW-1. 08 APR 2010 to 06 MAY 2010

HANIM ONE DEPARTURE (RNAV)

SL-9978 (FAA)

SALT LAKE CITY CENTER
133.4 285.4
GREAT FALLS RADIO
122.6
CTAF 122.8



NOTE: RNAV 1.

NOTE: GPS required.

TAKE-OFF MINIMUMS:
Rwy 16: Standard.
Rwy 34: NA. See RONAN DEPARTURE.

TAKE-OFF OBSTACLE NOTE:
Rwy 16: Tree 485′ from DER, 386′ left of centerline, 50′ AGL/3149′ MSL.

NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb to 13000 direct KANAF and via track 180° to CHARL and via track 255° to HANIM and hold, continue climb-in-hold to 13000 before proceeding on course.

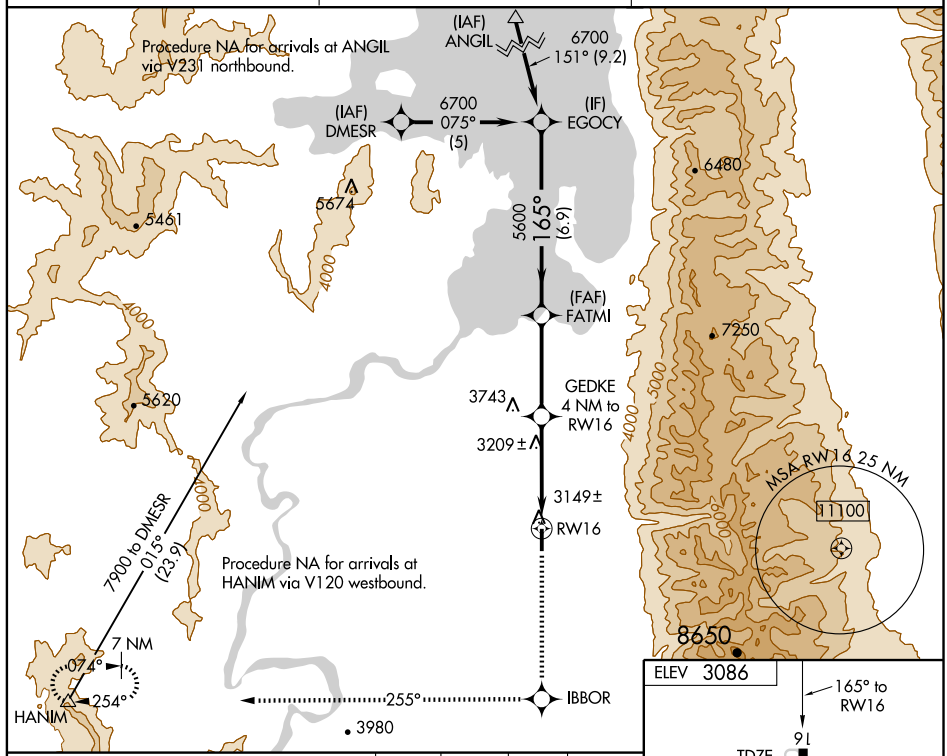
RNAV (GPS) RWY 16
RONAN (7SØ)

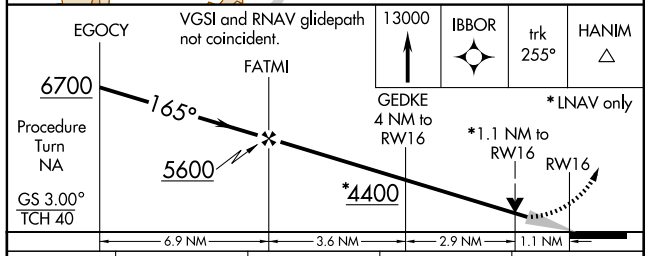
WAAS CH 45814 W16A	APP CRS 165°	Rwy ldg 4800 TDZE 3086 Apt Elev 3086

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F).
NA Circling NA east of Rwys 16 and 34. DME/DME RNP- 0.3 NA.

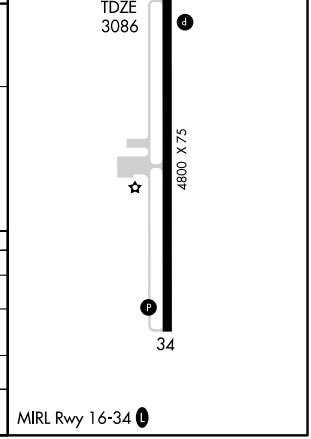
MISSED APPROACH: Climb to 13000 direct IBBOR and via track 255° to HANIM and hold, continue climb-in-hold to 13000.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
122.8	133.4 285.4	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	3386-1 300 (300-1)		NA	
LNAV/VNAV DA	3531-1½ 445 (500-1½)		NA	
LNAV MDA	3460-1 374 (400-1)		NA	
CIRCLING	3460-1 374 (400-1)	3540-1 454 (500-1)	NA	



NW-1, 08 APR 2010 to 06 MAY 2010

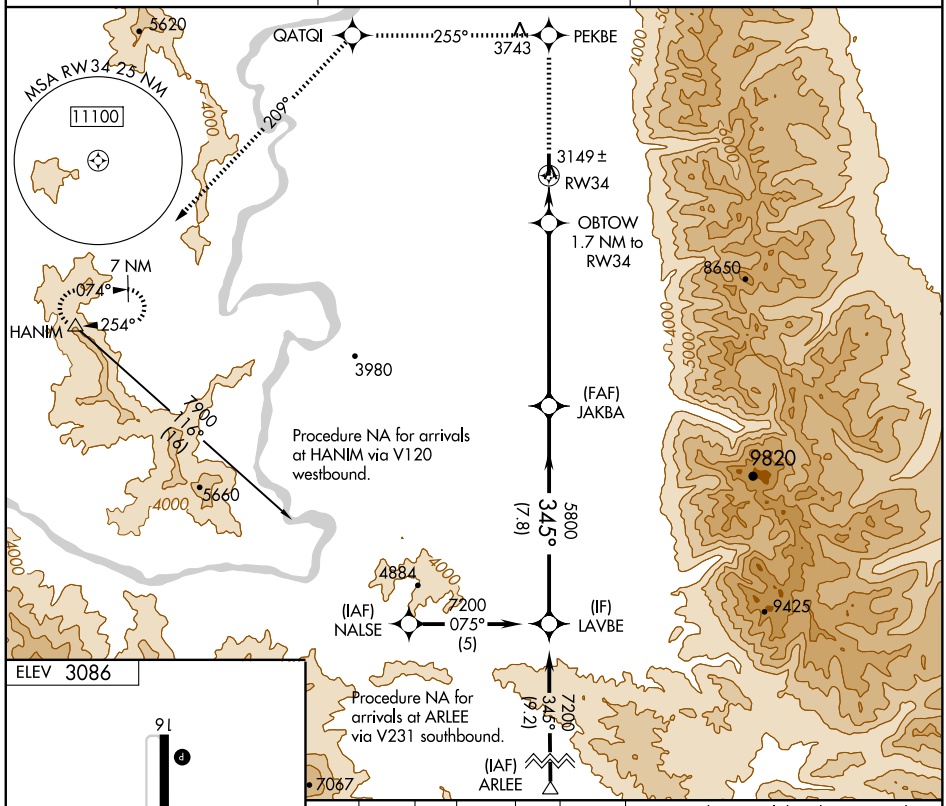
RNAV (GPS) RWY 34
RONAN (7S0)

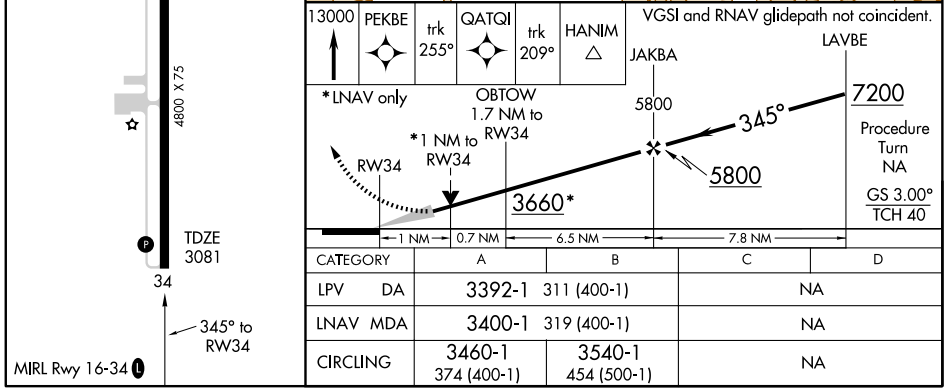
WAAS CH 86614 W34A	APP CRS 345°	Rwy ldg 4800 TDZE 3081 Apt Elev 3086

Circling NA east of Rwys 16 and 34.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 13000 direct PEKBE and via track 255° to QATQI and via track 209° to HANIM and hold, continue climb-in-hold to 13000.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
122.8	133.4 285.4	122.8 (CTAF) L



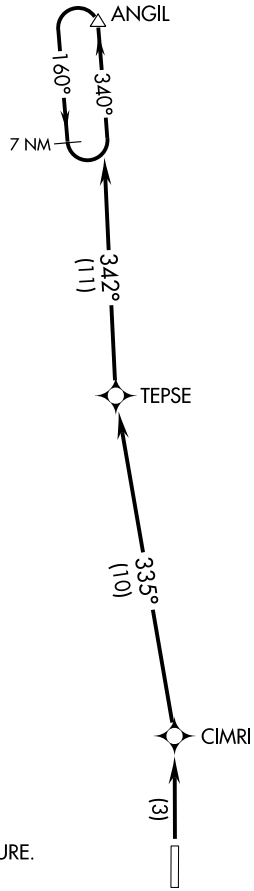


CATEGORY	A	B	C	D
LPV DA	3392-1 311 (400-1)		NA	
LNAV MDA	3400-1 319 (400-1)		NA	
CIRCLING	3460-1 374 (400-1)	3540-1 454 (500-1)	NA	

RONAN ONE DEPARTURE (RNAV)

SL-9978 (FAA)

SALT LAKE CITY CENTER
133.4 285.4
GREAT FALLS RADIO
122.6
CTAF 122.8



NOTE: RNAV 1.

NOTE: GPS required.

TAKE-OFF MINIMUMS:
Rwy 16: NA. See HANIM ONE DEPARTURE.
Rwy 34: Standard.

TAKE-OFF OBSTACLE NOTES:
Rwy 34: Building 158′ from DER, 370′ left of centerline, 40′ AGL/3130′ MSL.
Tree 1358′ from DER, 556′ left of centerline, 50′ AGL/3149′ MSL.

NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34: Climb to 10000 direct CIMRI and via track 335° to TEPSE and via track 342° to ANGIL and hold, continue climb-in-hold to appropriate MEA before proceeding on course.

APP CRS	Rwy ldg	4015
122°	TDZE	2385
	Apt Elev	2432

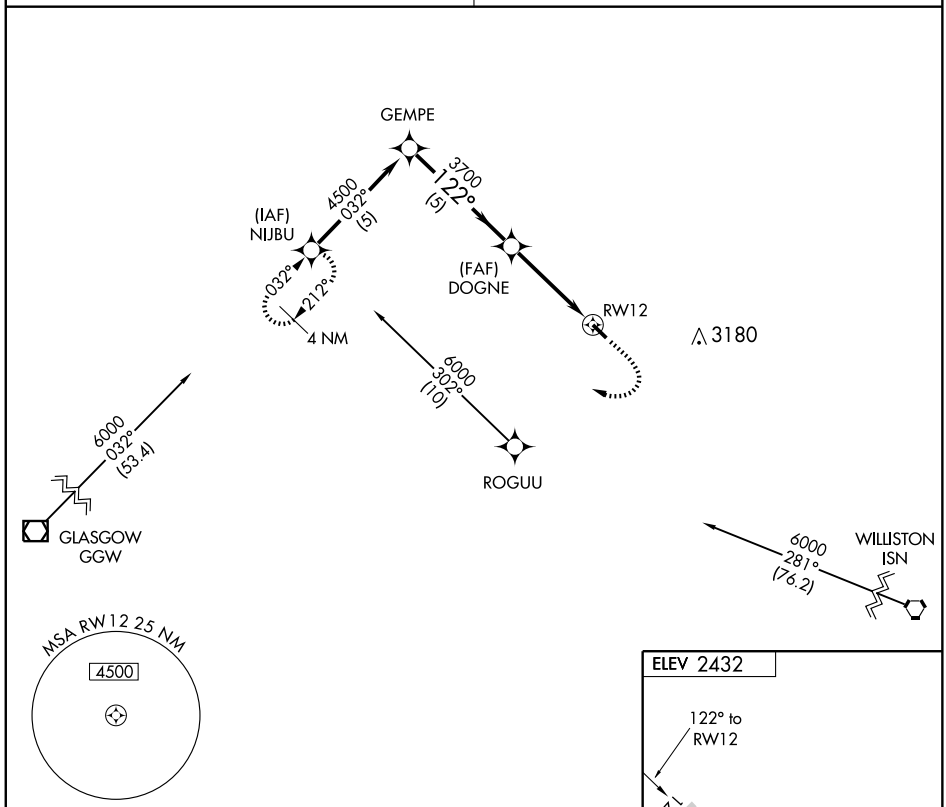
RNAV (GPS) RWY 12
SCOBEY (9S2)

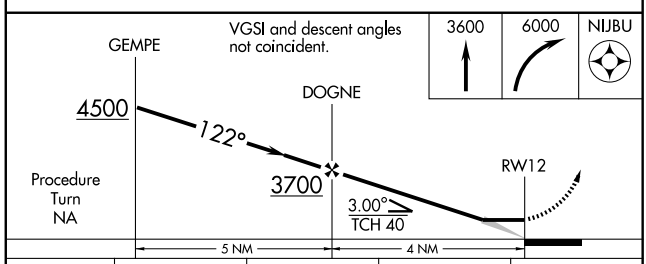
T NA

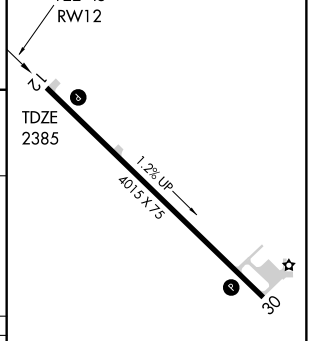
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Use Wolf Point altimeter setting; when not received procedure not authorized.

MISSED APPROACH: Climb to 3600 then climbing right turn to 6000 direct NIJBU WP and hold.

SALT LAKE CITY CENTER	UNICOM
126.85 305.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3100-1 715 (700-1)		NA	
CIRCLING	3100-1 668 (700-1)		NA	

MIRL Rwy 12-30 L

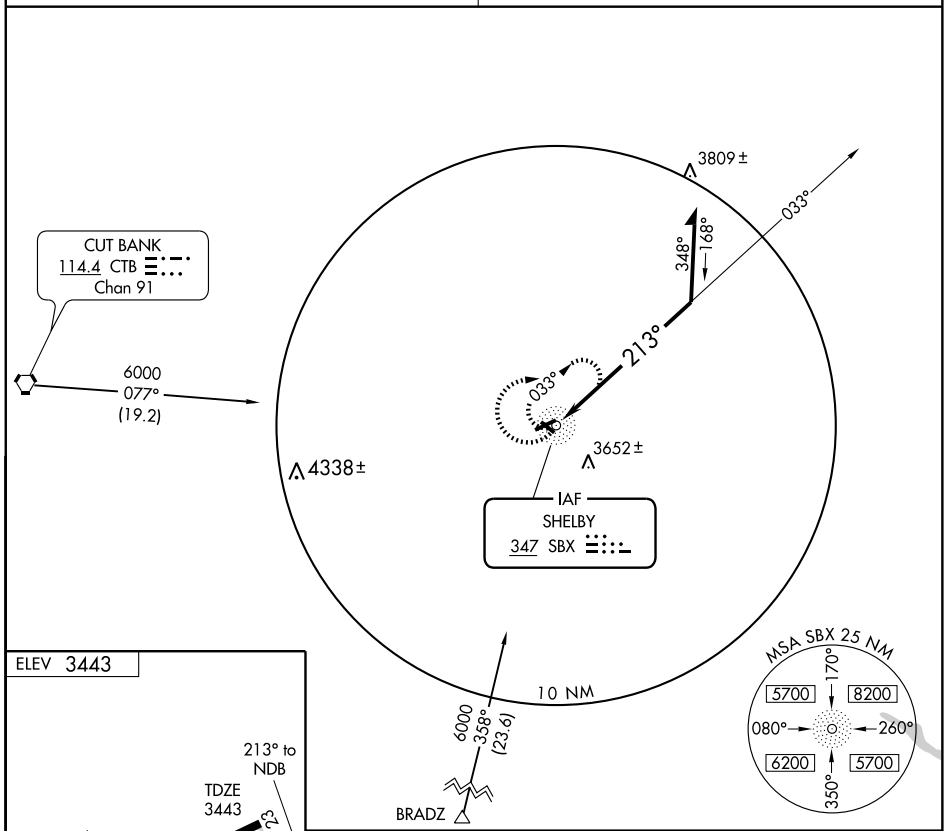
NDB SBX 347	APP CRS 213°	Rwy ldg 5004 TDZE 3443 Apt Elev 3443

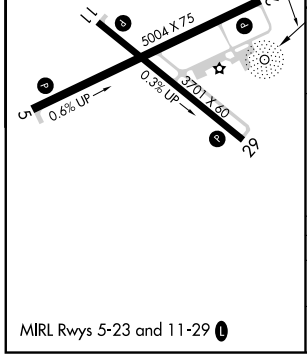
NDB RWY 23
SHELBY (SBX)

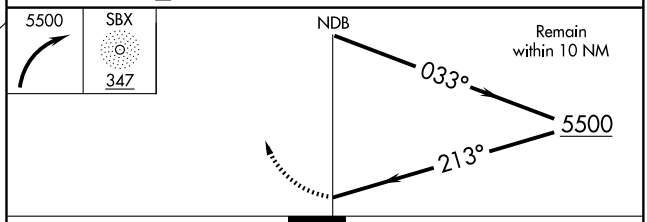
Visibility reduction by helicopters NA.
NA Use Cut Bank altimeter setting, if not received, use Great Falls altimeter setting and increase all MDAs 120 feet.

MISSED APPROACH: Climbing right turn to 5500 in SBX NDB holding pattern.

SALT LAKE CITY CENTER	UNICOM
133.4 285.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-23	4240-1 797 (800-1)	4240-1¼ 797 (800-1¼)	4240-2¼ 797 (800-2¼)	NA
CIRCLING	4240-1 797 (800-1)	4240-1¼ 797 (800-1¼)	4240-2¼ 797 (800-2¼)	NA

MIRL Rwys 5-23 and 11-29 L

NW-1. 08 APR 2010 to 06 MAY 2010

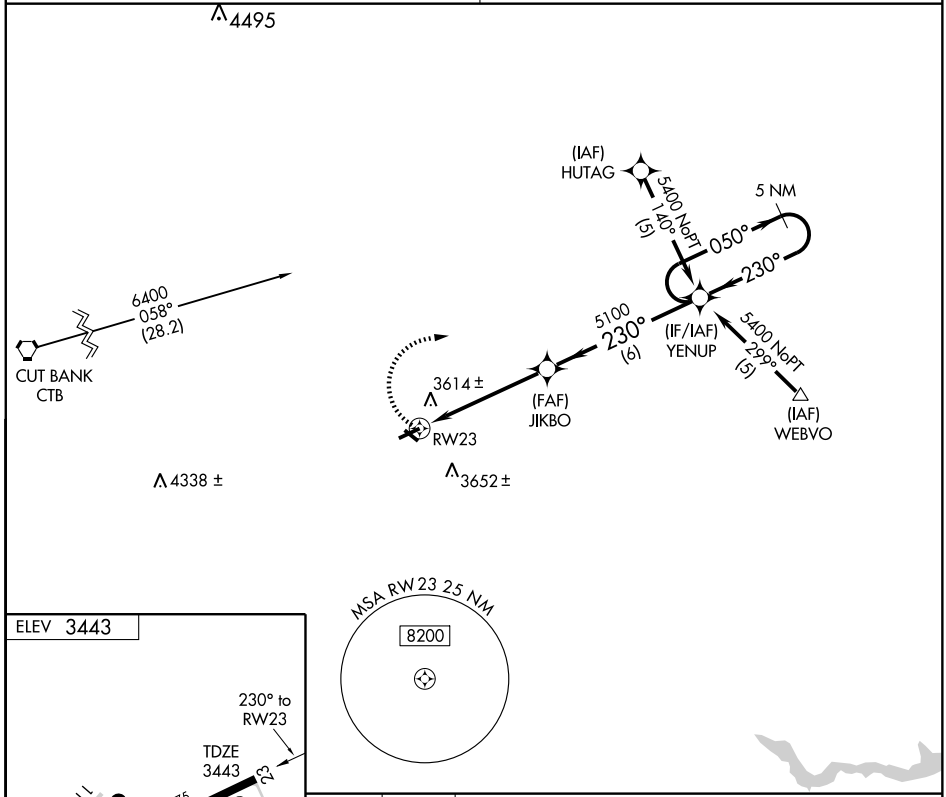
APP CRS	Rwy ldg	5004
230°	TDZE	3443
	Apt Elev	3443

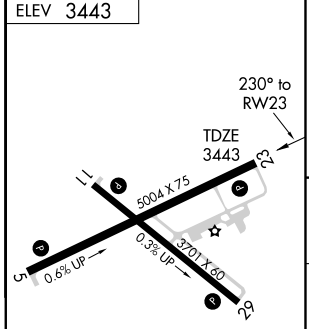
RNAV (GPS) RWY 23
SHELBY (SBX)

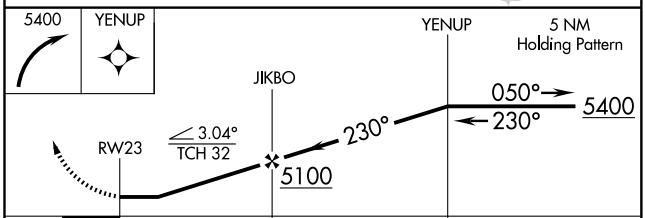
DME/DME RNP- 0.3 NA.
Circling NA at night.
NA Visibility reduction by helicopters NA.
Use Cut Bank altimeter setting, if not received, use Great Falls altimeter setting and increase all MDAs 120 feet.

MISSED APPROACH: Climbing right turn to 5400 direct YENUP and hold.

SALT LAKE CITY CENTER	UNICOM
133.4 285.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4060-1 617 (700-1)		4060-1¾ 617 (700-1¾)	NA
CIRCLING	4120-1 677 (700-1)		4120-2 677 (700-2)	NA

MIRL Rwys 5-23 and 11-29 L

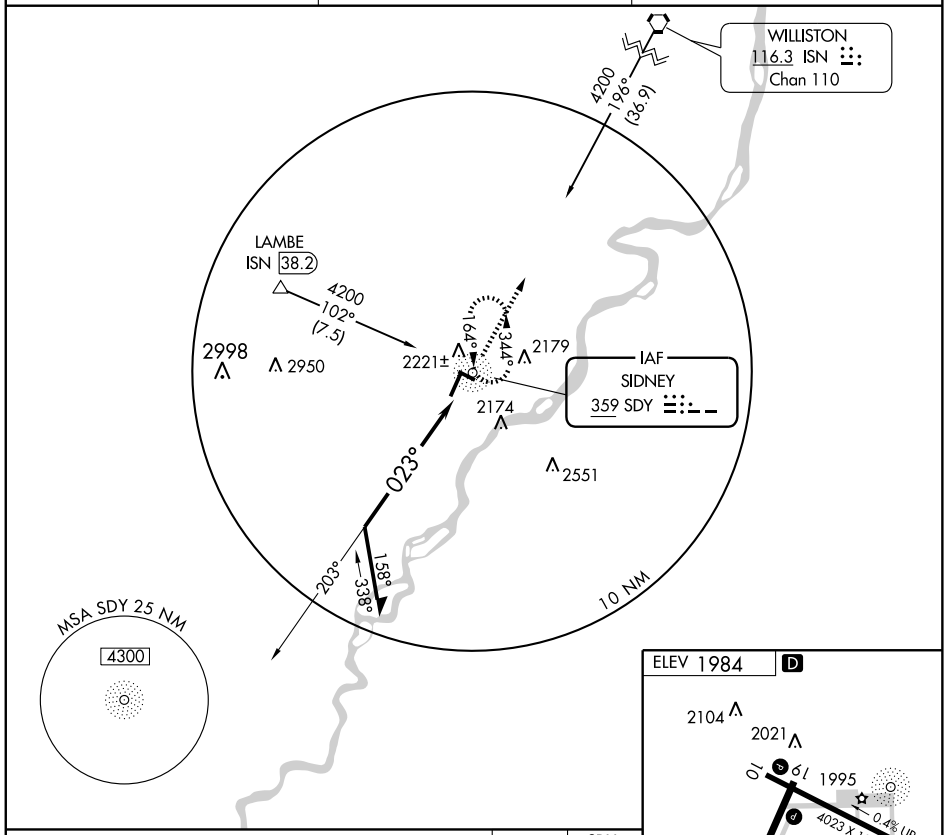
NW-1. 08 APR 2010 to 06 MAY 2010

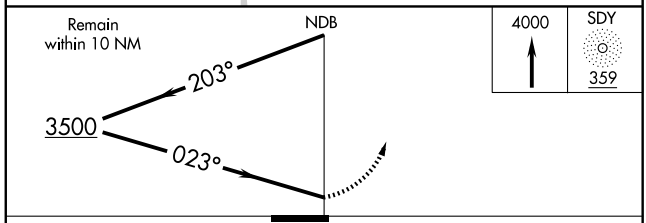
NDB SDY	APP CRS	Rwy ldg	5705
359	023°	TDZE	1984
		Apt Elev	1984

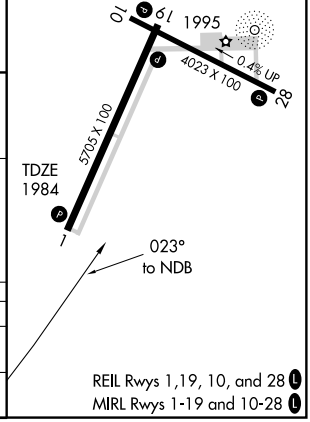
NDB RWY 1
SIDNEY-RICHLAND MUNI (SDY)

MISSED APPROACH: Climb to 4000 then direct SDY NDB and hold.

AWOS-3	GREAT FALLS RADIO	UNICOM
119.275	123.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-1	2720-1	736 (800-1)	2720-2 736 (800-2)	2720-2¼ 736 (800-2¼)
CIRCLING	2720-1	736 (800-1)	2720-2 736 (800-2)	2720-2¼ 736 (800-2¼)

NW-1, 08 APR 2010 to 06 MAY 2010

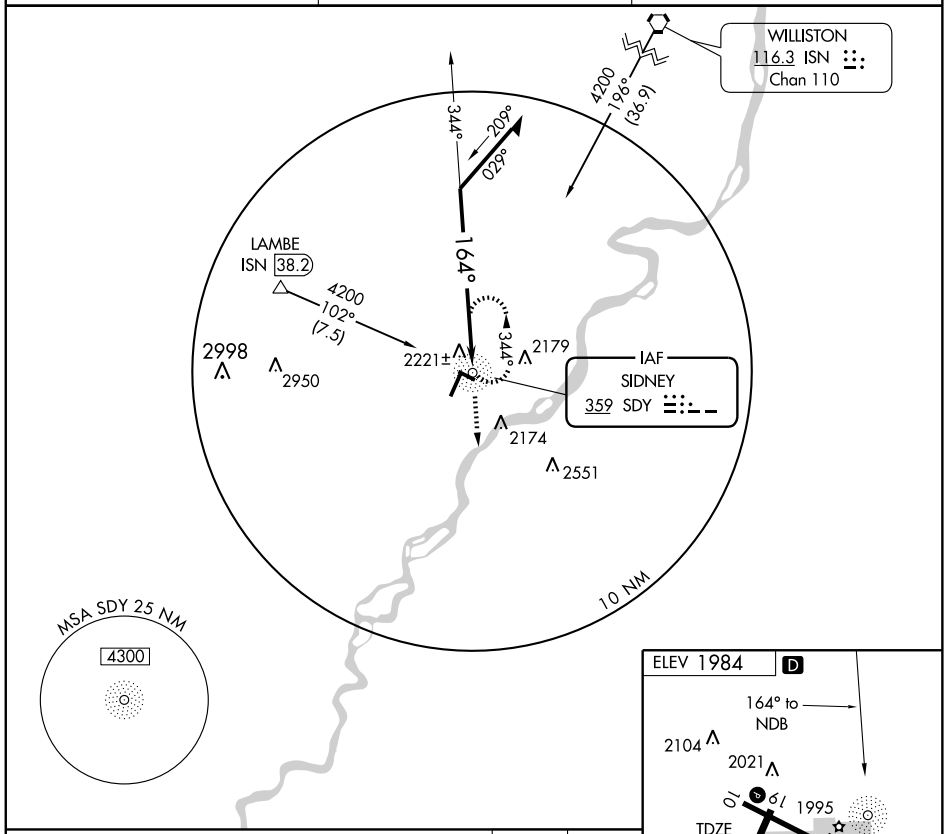
NDB SDY	APP CRS	Rwy ldg	5705
359	164°	TDZE	1979
		Apt Elev	1984

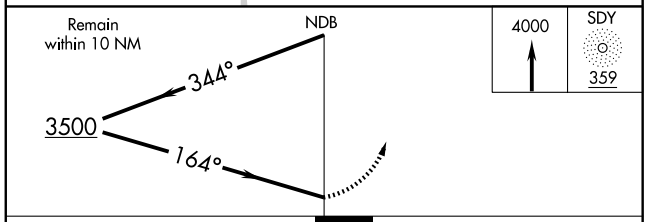
NDB RWY 19

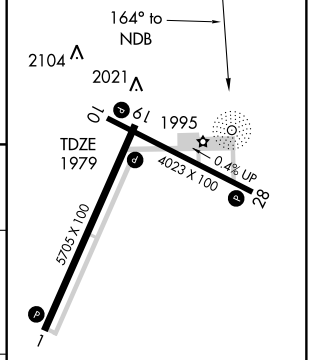
SIDNEY-RICHLAND MUNI (SDY)

MISSED APPROACH: Climb to 4000 then direct SDY NDB and hold.

AWOS-3	GREAT FALLS RADIO	UNICOM
119.275	123.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-19	2780-1 801 (800-1)	2780-1¼ 801 (800-1¼)	2780-2¼ 801 (800-2¼)	2780-2½ 801 (800-2½)
CIRCLING	2780-1 796 (800-1)	2780-1¼ 796 (800-1¼)	2780-2¼ 796 (800-2¼)	2780-2½ 796 (800-2½)

REIL Rwys 1,19, 10, and 28 L
MIRL Rwys 1-19 and 10-28 L

NW-1, 08 APR 2010 to 06 MAY 2010

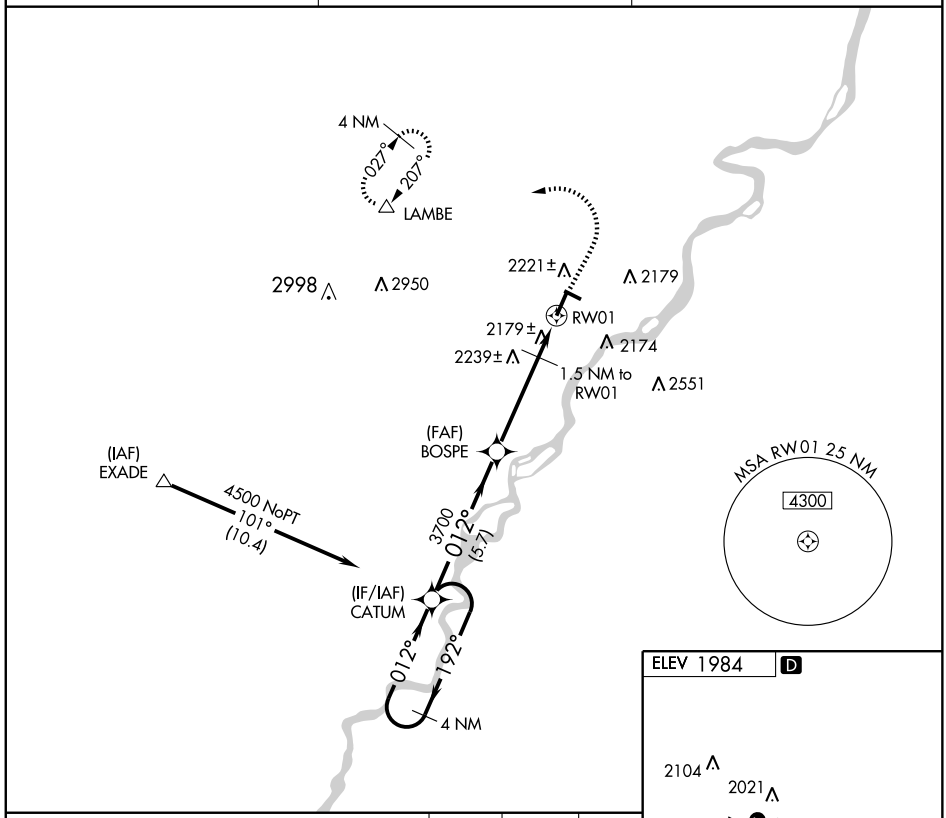
APP CRS	Rwy ldg	5705
012°	TDZE	1984
	Apt Elev	1984

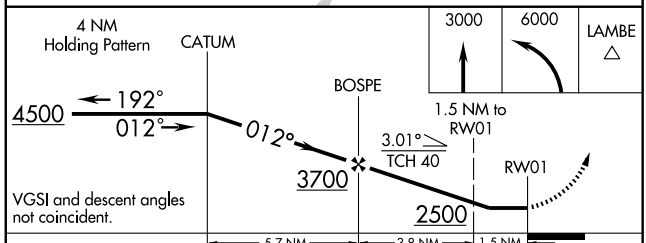
RNAV (GPS) RWY 1
SIDNEY-RICHLAND MUNI (SDY)

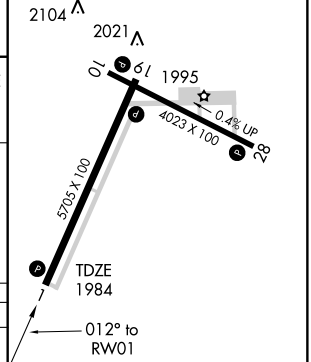
T
A NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 3000 then climbing left turn to 6000 direct LAMBE WP and hold.

AWOS-3	GREAT FALLS RADIO	UNICOM
119.275	123.65	122.8 (CTAF) L







REIL Rwys 1,19, 10, and 28 L
MIRL Rwys 1-19 and 10-28 L

CATEGORY	A	B	C	D
LNAV MDA	2440-1	456 (500-1)	2440-1¼ 456 (500-1¼)	2440-1½ 456 (500-1½)
CIRCLING	2620-1 636 (700-1)	2640-1 656 (700-1)	2680-2 696 (700-2)	2700-2¼ 716 (800-2¼)

NW-1. 08 APR 2010 to 06 MAY 2010

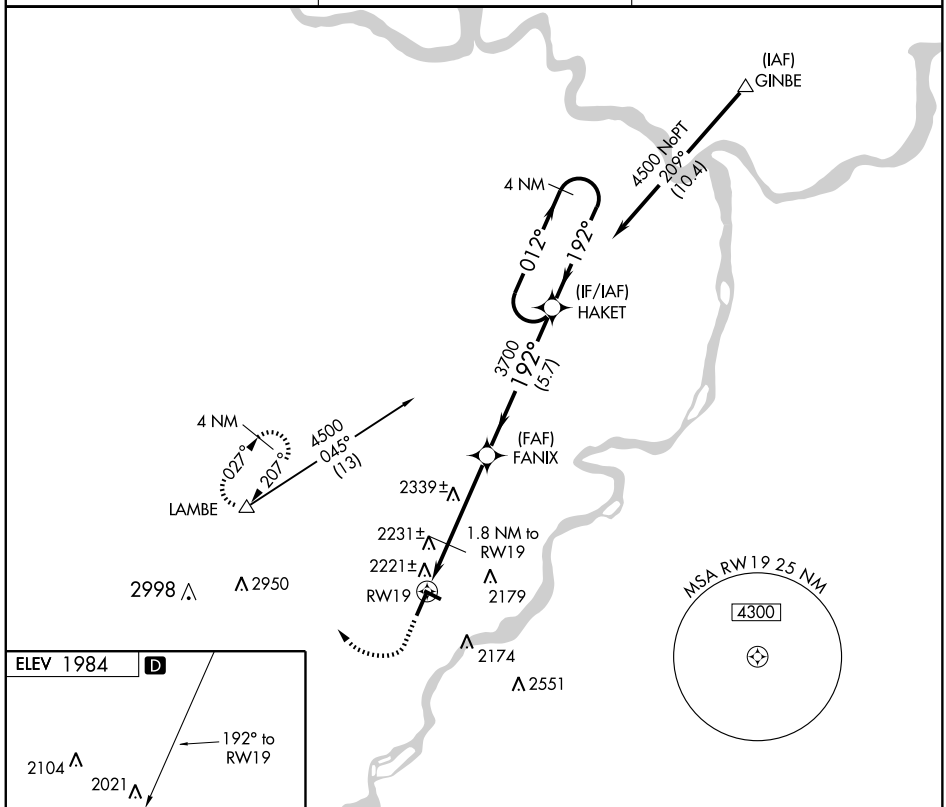
APP CRS	Rwy ldg	5705
192°	TDZE	1979
	Apt Elev	1984

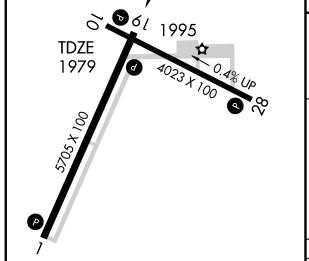
RNAV (GPS) RWY 19
SIDNEY-RICHLAND MUNI (SDY)

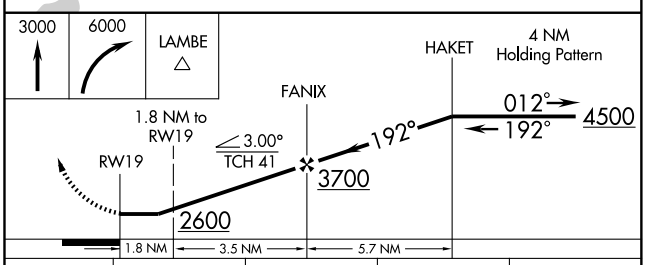
T
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 3000 then climbing right turn to 6000 direct LAMBE WP and hold.

AWOS-3	GREAT FALLS RADIO	UNICOM
119.275	123.65	122.8 (CTAF) L







REIL Rwys 1,19, 10, and 28 L
MIRL Rwys 1-19 and 10-28 L

CATEGORY	A	B	C	D
LNAV MDA	2500-1	521 (600-1)	2500-1½ 521 (600-1½)	2500-1¾ 521 (600-1¾)
CIRCLING	2620-1 636 (700-1)	2640-1 656 (700-1)	2680-2 696 (700-2)	2700-2¼ 716 (800-2¼)

NW-1. 08 APR 2010 to 06 MAY 2010

RNAV (GPS)-A
STEVENSVILLE (32S)

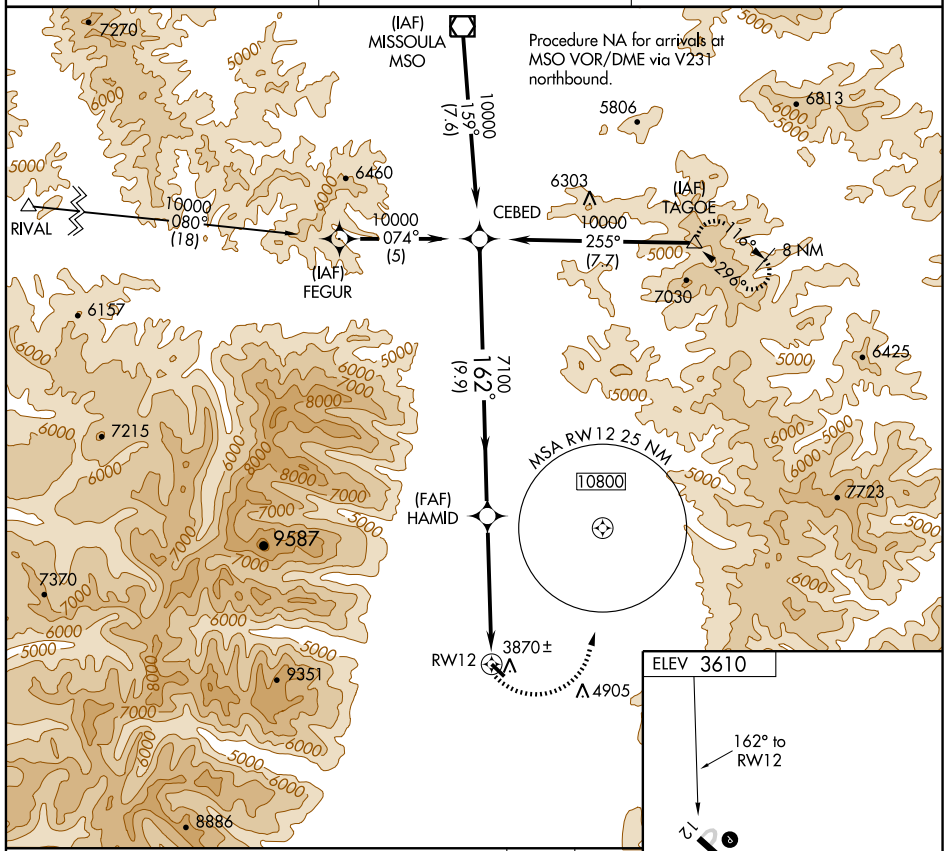
APP CRS	Rwy ldg	N/A
162°	TDZE	N/A
	Apt Elev	3610

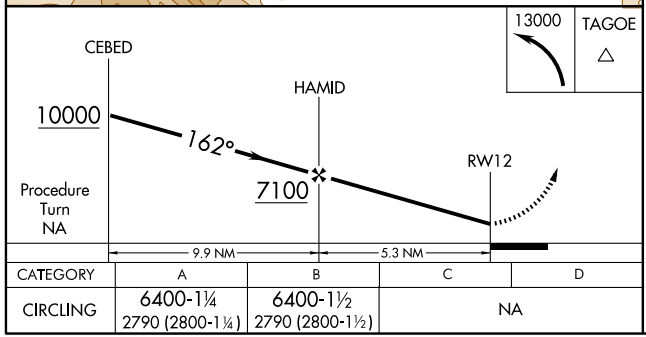
DME/DME RNP- 0.3 NA.
Use Missoula Intl altimeter setting.
Circling NA at night to Rwy 30.

NA

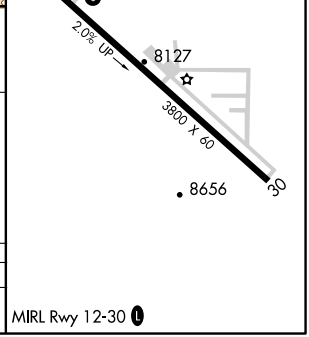
MISSED APPROACH: Climbing left turn to 13000 direct TAGOE WP and hold.

MISSOULA ASOS	SPOKANE APP CON ★	UNICOM
126.65	124.9 298.95	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	6400-1¼ 2790 (2800-1¼)	6400-1½ 2790 (2800-1½)	NA	



MIRL Rwy 12-30 L

NW-1, 08 APR 2010 to 06 MAY 2010

LOC I-LOW	APP CRS	Rwy ldg	8399
110.7	010°	TDZE	6644
		Apt Elev	6644

ILS or LOC RWY 1

WEST YELLOWSTONE/YELLOWSTONE (WYS)

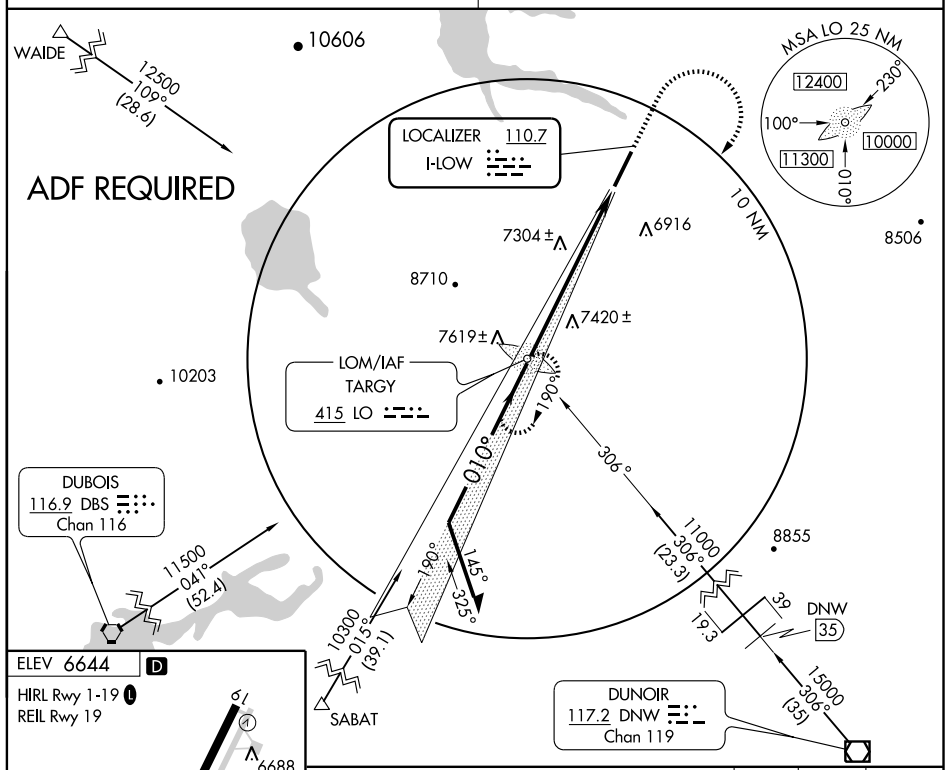
T NA — If local altimeter setting not received, procedure not authorized.

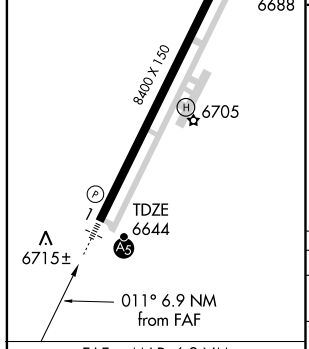
MALSR A5

MISSED APPROACH: Climb to 7600, then climbing right turn to 10000 direct LO LOM and hold.

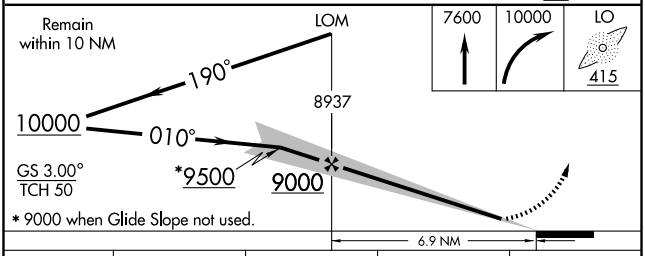
SALT LAKE CENTER **132.4 338.3**

UNICOM **123.0** (CTAF) L





FAF to MAP 6.9 NM					
Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18



CATEGORY	A	B	C	D
S-ILS 1	6844-½ 200 (200-½)			
S-LOC 1	7720-¾ 1076 (1100-¾)	7720-1 1076 (1100-1)	7720-2½ 1076 (1100-2½)	
CIRCLING	7720-1¼ 1076 (1100-1¼)	7720-1½ 1076 (1100-1½)	7720-3 1076 (1100-3)	

NW-1, 08 APR 2010 to 06 MAY 2010

LOM LO	APP CRS	Rwy ldg	8399
415	011°	TDZE	6644
		Apt Elev	6644

NDB or GPS RWY 1

WEST YELLOWSTONE/YELLOWSTONE (WYS)

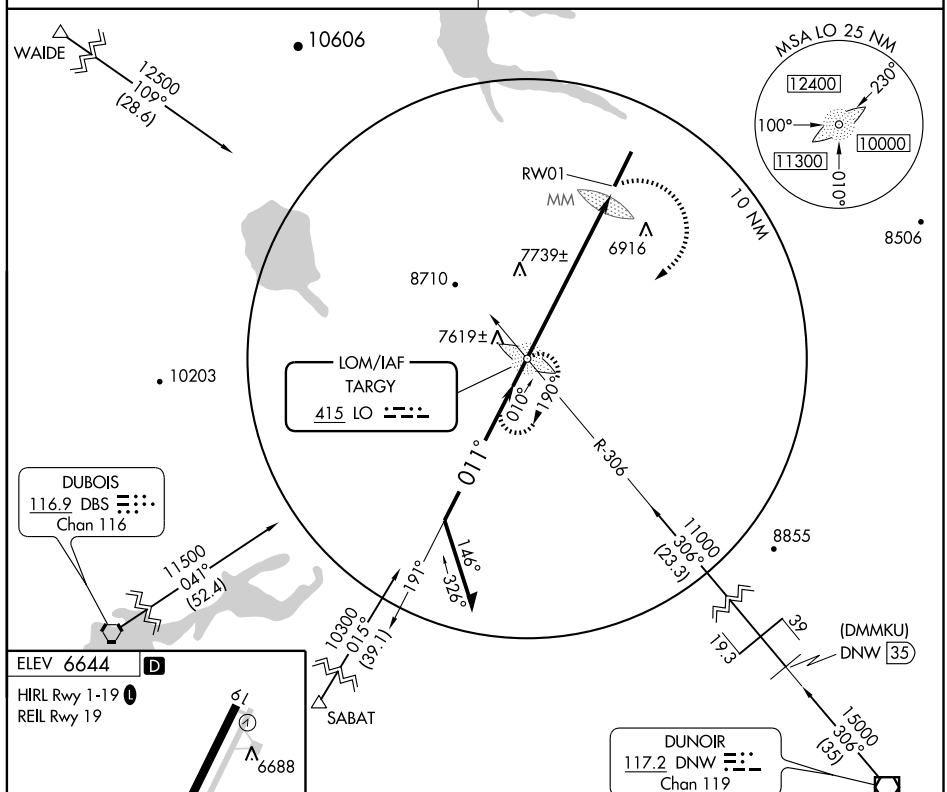
If local altimeter setting not received, procedure not authorized. Categories A and B, S-1 visibility increased ½ mile for inoperative MALSR.

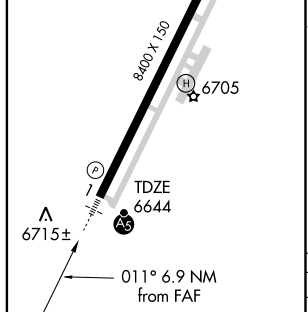
NA

MALSR

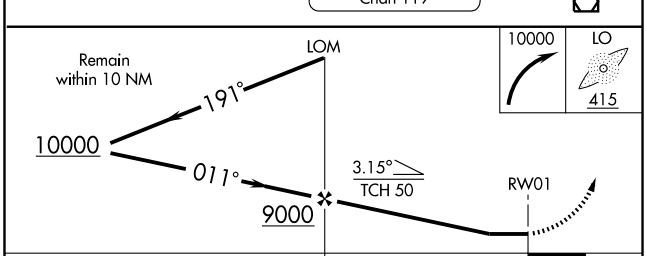
MISSED APPROACH: Climbing right turn to 10000 direct LO LOM and hold.

SALT LAKE CENTER	UNICOM
132.4 338.3	123.0 (CTAF)





FAF to MAP 6.9 NM					
Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18



CATEGORY	A	B	C	D
S-1	8000-¾ 1356 (1400-¾)	8000-1 1356 (1400-1)	8000-2½ 1356 (1400-2½)	8000-2¾ 1356 (1400-2¾)
CIRCLING	8000-1¼ 1356 (1400-1¼)	8000-1½ 1356 (1400-1½)	8000-3 1356 (1400-3)	

NDB OLF 404	APP CRS 286°	Rwy ldg 5089 TDZE 1986 Apt Elev 1986

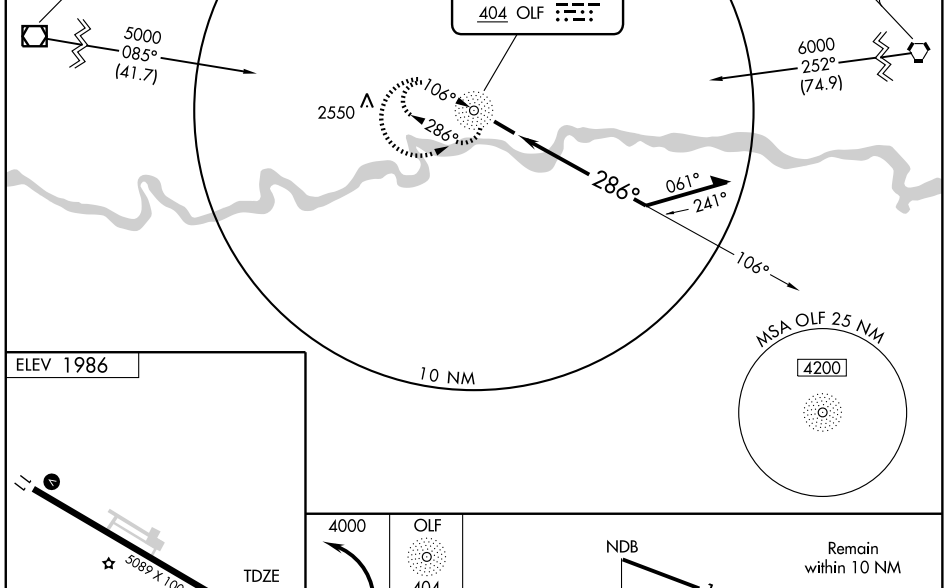
NDB RWY 29

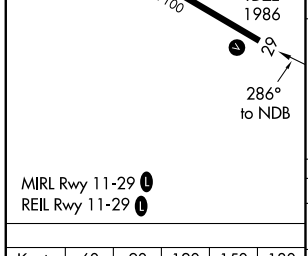
WOLF POINT/L. M. CLAYTON (OLF)

NA If local altimeter setting not received, used Wokal Field/Glasgow Intl altimeter setting and increase all MDAs 160 feet.

MISSED APPROACH: Climbing left turn to 4000 direct OLF NDB continue climb-in-hold to 4000.

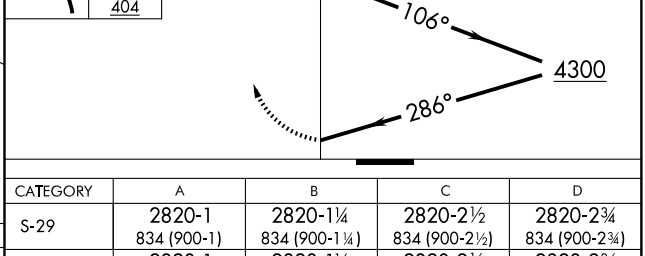
ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L





MIRL Rwy 11-29 L
REIL Rwy 11-29 L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-29	2820-1 834 (900-1)	2820-1¼ 834 (900-1¼)	2820-2½ 834 (900-2½)	2820-2¾ 834 (900-2¾)
CIRCLING	2820-1 834 (900-1)	2820-1¼ 834 (900-1¼)	2820-2½ 834 (900-2½)	2820-2¾ 834 (900-2¾)

APP CRS	Rwy ldg	5089
109°	TDZE	1986
	Apt Elev	1986

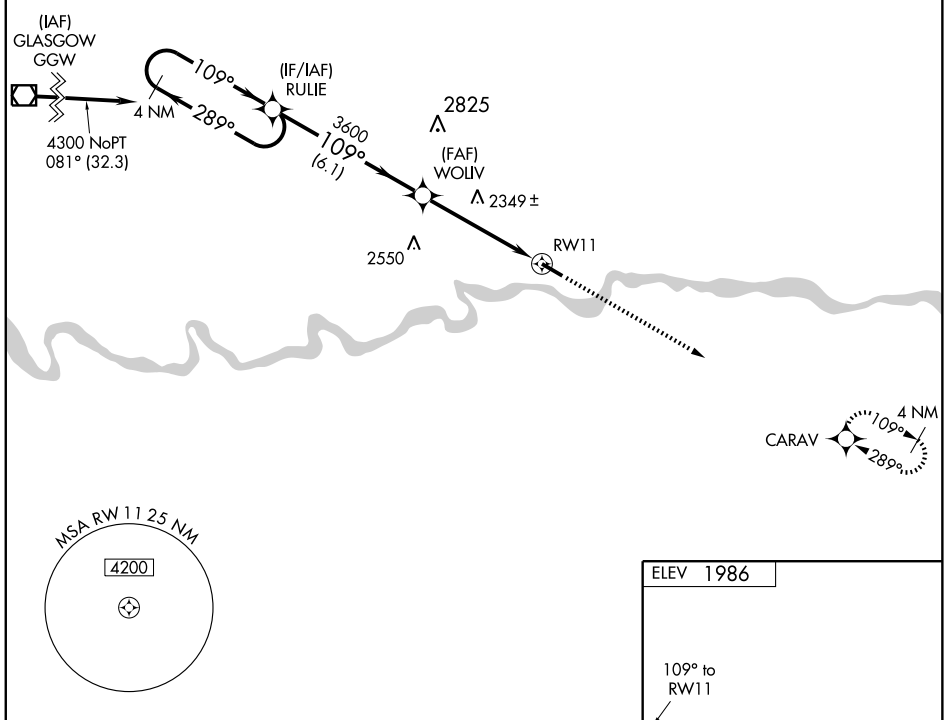
RNAV (GPS) RWY 11
WOLF POINT/L. M. CLAYTON (OLF)

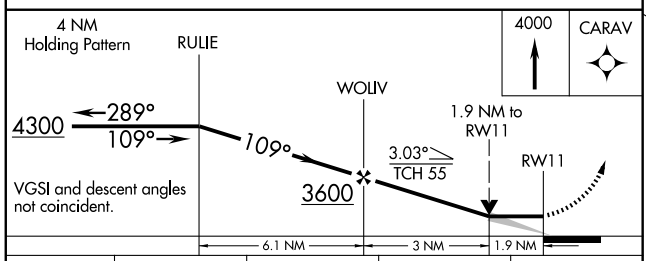
DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Wokal Field/Glasgow Intl altimeter setting and increase all MDAs 140 feet.
VDP NA when using Wokal Field/Glasgow Intl altimeter setting.
Straight-in minimums NA at night.

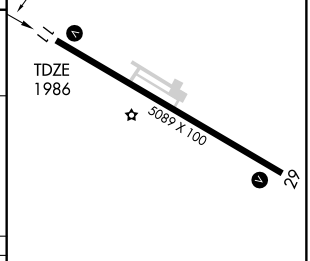
MISSED APPROACH: Climb to 4000 direct CARAV and hold.

ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L

Procedure NA for arrival at GGW VOR/DME via V430 westbound.







CATEGORY	A	B	C	D
LNAV MDA	2600-1 614 (700-1)		2600-1¾ 614 (700-1¾)	2600-2 614 (700-2)
CIRCLING	2600-1 614 (700-1)		2600-1¾ 614 (700-1¾)	2600-2 614 (700-2)

MIRL Rwy 11-29 L
REIL Rwy 11-29 L

NW-1. 08 APR 2010 to 06 MAY 2010

APP CRS	Rwy ldg	5089
289°	TDZE	1986
	Apt Elev	1986

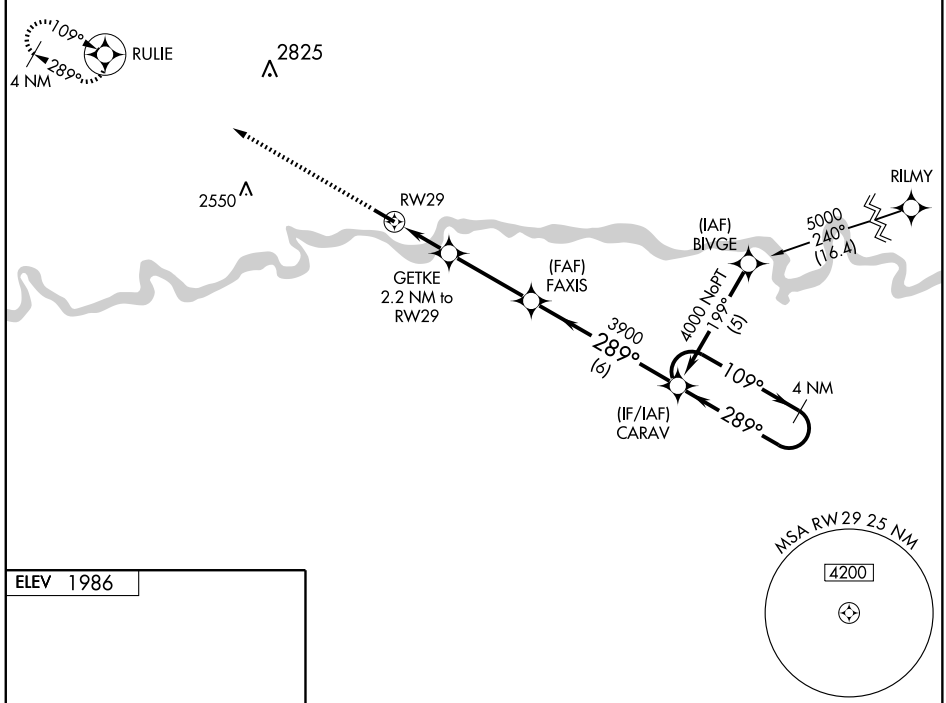
RNAV (GPS) RWY 29
WOLF POINT/ L. M. CLAYTON (OLF)

DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Wokal Field/Glasgow Intl altimeter setting and increase all MDAs 160 feet.
VDP NA when using Wokal Field/Glasgow Intl altimeter setting.

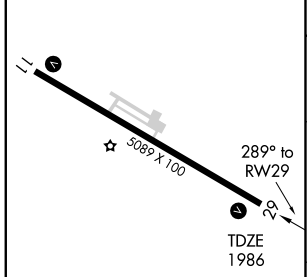
MISSED APPROACH: Climb to 4300 direct RULIE and hold.

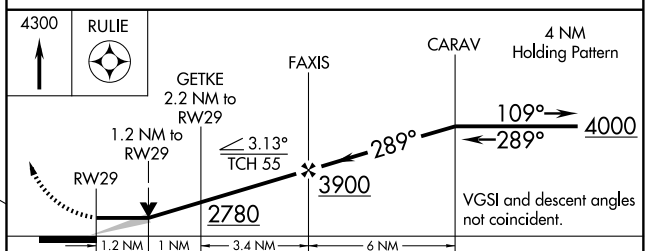
ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L

Procedure NA for arrival at RILMY via V430 eastbound.



ELEV 1986





CATEGORY	A	B	C	D
LNAV MDA	2380-1 394 (400-1)			2380-1¼ 394 (400-1¼)
CIRCLING	2540-1 554 (600-1)		2540-1½ 554 (600-1½)	2580-2 594 (600-2)

MIRL Rwy 11-29 L
REIL Rwy 11-29 L

NW-1. 08 APR 2010 to 06 MAY 2010